

The Medical Officer of Health **City & County of Bristol**

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REPORT FOR

1967

THE HEALTH OF BRISTOL IN 1967



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THE HEALTH OF BRISTOL IN 1967

My Lord Mayor, Ladies and Gentlemen,

I have the honour to present my twelfth Annual Report on the health of the City and County of Bristol which is compiled in accordance with Ministry of Health Circular 1/68.

The Registrar-General estimated that the population in 1967 was 429,020 compared with 429,370 in 1966. There is a discrepancy between these estimates and the results of the 10 per cent sample census taken in April 1966 when of a total estimated population of 433,050 there were 56,790 people aged 65 years and over, 13·1 per cent of the total population. Of 20,410 people aged 75 years and over living in the City in 1966, only 6,340 (31·1 per cent) were men. There were 34,490 one and two person households with people of pensionable age, 69·4 per cent of people of pensionable age. Among the people living in one-person households, there were 1,830 men aged 65 years and over and 11,430 women aged 60 years and over. Of the sample census population, 6,000 were born in foreign countries, 5,100 in the Irish Republic, 1,420 in Northern Ireland, 840 in Canada, Australia and New Zealand and 6,880 in other Commonwealth countries. 5,860 people migrated to the area in the preceding five years, 2,420 in the past year. The percentages in the St. Paul and District Wards born overseas were 17·2 and 14·9 respectively.

The total number of births in 1967 was 7,003 giving a live birth rate of 16·8, compared with 7,301 live births and a birth rate of 17·5 in 1966. The stillbirth rate was 12·8 per 1,000 live and still births in 1967, (14·7 in 1966), the neonatal death rate was 12·3 per 1,000 live births (11·8 in 1966) and the perinatal death rate was 23·4 per 1,000 live and stillbirths (25·2 in 1966). The infant mortality rate was 16·8 per 1,000 total live births and showed an improvement on the previously lowest recorded rate of 17·3 in 1966 and is better than the provisional rate of 18·3 for England and Wales. The adjusted death rate for Bristol, 11·1, was the lowest since 1958.

There were no maternal deaths in 1967, an achievement previously recorded only in 1963.

Progress was made during the year in cervical cytology and of 5,182 smears taken in clinics, 18 cases of carcinoma "in situ" were detected and dealt with by operative treatment.

In his Annual Report for 1966, the Chief Medical Officer to the Ministry of Health wrote that the number of deaths which could fairly be attributed to smoking—from cancer, bronchitis and heart disease—had exceeded 50,000 and the years of invalidism or ill health must be added to the years of life lost. The number of people who died from cancer of the lung and bronchus in England and Wales in 1967 was 28,250 (23,546 men and 4,704 women) compared with a total of 27,704 in 1966. There was a sharp increase in Bristol in 1967, when there were 288 deaths (233 men and 55 women) compared with 239 (203 men and 36 women) in 1966.

Deaths from coronary heart disease have shown a steady increase since detailed figures were first published in 1950 and in Bristol the numbers have risen from 503 to 1,147.

The number of deaths attributed to suicide showed an increase for the second year in succession, people aged between 30 and 49 years were especially affected and more cases were attributed to depression.

Infectious Diseases and their Prevention

For the eighteenth consecutive year there was no case of diphtheria and for the sixth year none of poliomyelitis. The number of cases of whooping cough rose from 117 in 1966 to 333 in 1967 and the Department collaborated in a nation-wide enquiry by the Public Health Laboratory Service to re-examine the efficacy of whooping cough vaccines in current use. The disease is more severe in infancy and the death was reported of a girl of five months who had two unprotected older siblings.

There were 3,721 notifications of measles compared with 3,530 in 1966. During the period 1951–1966 the average number of measles notifications per year in the City was 4,318, but this is an underestimate of the true incidence of the disease because a study of school medical records suggested that about 85 per cent of children have suffered from measles before the date of their first inspection at the age of 5½ years. Since 1966, Bristol has been one of the eight local authorities participating in a study organised by the Medical Research Council to compare the incidence of measles in communities which have aimed to immunise all children between the ages of 1 and 10 years with that in other communities (including Bristol) where efforts have been concentrated on children in their second year of life. In Bristol the initial injection of killed vaccine was followed one month later by an injection of live attenuated vaccine. A recently published report on the nation-wide study shows that both vaccination schedules induced substantial protection and the incidence of measles in children exposed to the disease at home was 6 per cent for the group given killed and live vaccines, 2 per cent for the group given live vaccine alone and 82 per cent for the unvaccinated children.* In addition it was found that when measles attacked vaccinated children it was on the average of a milder form than in those who had not been vaccinated. It was further reported that the higher degree of protection shown by the live vaccine compared with the killed and live vaccines was statistically significant. In Bristol about 5 per cent of children who received a dose of killed vaccine did not attend for the injection of live vaccine and it was agreed to change to a single dose of live vaccine from 1st January, 1968.

In April the new scheme for the direct payment of general medical practitioners for immunisation procedures was introduced and the proportion of primary and booster injections given by family doctors rose from 42 per cent to nearly one half. There was a substantial increase in the numbers of booster doses of oral poliomyelitis, diphtheria and tetanus vaccine, but less of booster injections of whooping cough vaccine.

The decline in notifications of tuberculosis has continued and only one-fifth of the new cases for 1967 were in people under the age of 20 years.

General Epidemiology

There were 824 notifications of dysentery, compared with an average of 552 per annum in the ten years 1958 to 1967 inclusive. The infection is most common in childhood and the main precaution against this disease and other forms of infectious gastro-enteritis, is strict attention to personal hygiene. There were 82 notifications of Salmonella infection including a small outbreak of Salmonella Brandenburg associated with a type of meat product which subsided when appropriate action was taken in an abattoir outside the City.

In the last two weeks of December influenza of A2 strain was reported, especially in the old people's homes and close contact was maintained with family doctors and industrial medical officers.

**British Medical Journal* (1968), 1, 449–452.

Increasing interest is being taken in the epidemiology of rubella and of 302 Bristol expectant mothers, 77 per cent were found to possess neutralising antibody to rubella at a level judged high enough to protect against further infection. Second attacks of the disease, which is commonest in the first half of the year, do not occur. It is hoped that more evidence will soon be forthcoming on the value of gamma globulin given to expectant mothers in the first three months of pregnancy who may have come in contact with rubella infection.

There were 487 cases notified of infectious hepatitis compared with 556 in 1966.

There were 162 notifications of glandular fever compared with 118 in 1966. Of 695 people in Bristol suffering from the disease in the last five years, 462 (67.8 per cent) were young adults, aged between 15 and 24 years. There is new evidence from the United States that a virus may play some part in this disease.

There were two episodes of epidemic vomiting in girls' schools. The first occurred in March in a day and residential school. Sixty-four out of 226 girls were affected, all within a period of 24 hours, the most common symptoms being vomiting (82 per cent), abdominal pain (45 per cent) and diarrhoea (30 per cent). In the second outbreak in November, 213 individuals out of a total of 628 at risk were affected, with a similar clinical picture.

Foreign Travel

About 25 per cent of vaccinations were for people travelling abroad on business, about the same as in previous years. The percentage for emigrants has increased from 5 per cent in 1962 to 14 per cent in 1967. Most of the remainder were going abroad on holiday. The percentage of clinic attenders travelling by air has nearly doubled since 1962, to nearly 75 per cent in 1967. The great majority of vaccinations for foreign travel are still given by general practitioners.

Venereal Disease

During the year the number of visits made by the social worker increased and although the number of new patients seen was substantially more than in 1966 the total was lower than in 1965. A disquieting feature was that of all male cases of gonorrhoea seen at the main Bristol clinic more than 10 per cent were under the age of 20 years and of the female patients nearly 40 per cent were under 20 years.

Maternal and Child Welfare

In 1967, 84 per cent of babies were born in maternity hospitals or units, the highest rate ever recorded for institutional deliveries. The number of mothers discharged early from hospital for home nursing, usually on the second day, remained high and in all 1,012 women were discharged within the first three days, 644 on the fourth and fifth and 397 between the sixth and eighth days.

In November, arrangements were introduced for the domiciliary midwife to take responsibility for the care of mother and baby in the first month for all domiciliary confinements and in all hospital confinements where mother and baby are discharged home early. The health visitor continues to take responsibility for the mother and baby born in hospital who return home on or after the ninth day and do not need the attention of a midwife. In practice this means that approximately half of the mothers and babies are followed up for the first month by the midwife and the other half by the health visitor.

With the agreement of the Health Committee, Southmead Hospital Group Management Committee and the Local Medical Committee, a small pilot trial of a general practitioner short stay delivery unit, based at Southmead Hospital, was started on 18th September. The unit consists of one labour room with adjoining ancillary rooms attached to the main delivery suite at the maternity department. Patients are taken to the unit, cared for by their domiciliary midwife and general practitioner and returned home accompanied by their midwife generally within a few hours of confinement. This scheme was originally proposed in 1956 by Dr. J. Sluglett, a Bristol general practitioner, and Dr. Sarah Walker.* By the end of the year 21 patients had been delivered in the short stay unit and all were satisfied with the scheme.

After consultation with the chest physicians, the obstetricians, the Professor of Radiology and general practitioners, it was agreed to discontinue chest X-rays of expectant mothers as a routine procedure but to retain their use for all immigrant expectant mothers or where there was a family history of tuberculosis.

The National Health Service (Family Planning) Act, 1967, allowed local health authorities new powers to give advice on contraception on social grounds and at the end of the year discussions were taking place with regard to the Department's future arrangements. During 1967, 917 women attended City clinics for the first time for birth control advice and 783 of these attended the special clinic for the fitting of the intra-uterine contraceptive device. The Family Planning Association continued to hold sessions at six of the City's clinics.

Many of the recommendations of the Report of the Advisory Sub-Committee of the Standing Medical Committee (Sheldon Committee) published in November 1967, of which Dr. M. B. Lennard, a local general practitioner, was a member, had been anticipated in Bristol. The Committee were in no doubt about the continuing need for a preventive service, based on child health clinics, to safeguard the health of children, and in the long-term the Committee considered that this service would be part of a family health service provided by family doctors working in groups from purpose-built family health centres.

In Bristol, general practitioners have for several years been offered facilities to undertake child welfare work for their own patients in Corporation clinics and health centres but at present only 36 are doing so. A few general practitioners in the City hold child welfare sessions in their own surgery premises but, because of the lack of time, others wishing to undertake this work are at present unable to do so. The need for medical officers of the local health authority in the child health services, therefore, continues and those with special training have an important role in the periodic developmental assessment of the young child.

Professor Gordon Lennon, who held the chair of Obstetrics and Gynaecology in the University of Bristol since 1951, left Bristol in June to take up the post of Dean of the Medical School of the University of Western Australia. Officers of the Department enjoyed very friendly associations with Professor Lennon and we welcome and look forward to similar co-operation with his successor, Professor Geoffrey Dixon, formerly Honorary Consultant Obstetrician and Gynaecologist, Hammersmith Hospital and Senior Lecturer in the Institute of Obstetrics and Gynaecology, University of London.

Information for the register of children under 5 years with congenital and acquired abnormalities is obtained from, amongst other sources, birth and death

**The Lancet* (1956), 1, 684-686.

notifications, coroners' reports, discharge notes on babies leaving the maternity hospital or the care of the district midwives, hospital reports after outpatient or inpatient examinations and health visitors. Unfortunately, the birth notification form has proved to be inaccurate and incomplete as a source and in 1967 only 134 children were notified as having congenital abnormalities whereas there were 537 children on the register for this period. Among the special investigations for which the register is being used are the incidence of congenital abnormalities following the rubella outbreak in May 1967, the seasonal incidence of abnormalities, the survey of children with multiple handicaps, the number of children with spina bifida who are likely to need placement in nursery or special schools and the numbers who are mentally sub-normal who will require assistance from the Mental Health Section of the Department.

Dental Health Education

The scheme for sending out greeting cards to all 3-year-old children, which was started in 1963, was the subject of a study during the year and a summary of the findings is printed in the report. As a result of this work it has been decided that future attempts to convince parents of the need to take their children to a dentist for inspection before the children go to school, will be done in association with certain routine visits by health visitors.

Home Safety

Of the 63 fatal accidents occurring at home or in institutions during the year, 39 (35 women and 4 men) were the result of falls, 10 of poisoning, 8 of burns, 4 in house fires, 1 after striking a metal flower stake and 1 after inhaling a foreign body. More than half of the victims were elderly women and 19 were aged between 80 and 90 years. It is possible that the further development of pre-retirement courses for husbands and wives, in which senior members of the medical staff are participating, might result in a decrease in the number of accidents, especially falls.

The Home Safety Council exhibit at Bristol Flower Show was again awarded a gold medal, and in October a Fire and Safety Exhibition was staged for one week in the St. Paul area. The Lord Mayor opened the exhibition which was visited by about 1,000 school children from the district and many of the schools contributed material, provided by the children, to the exhibition.

Nursing Services

The opening of the third health centre at Stockwood presented an opportunity of trying out a new pattern of nursing services in the area, based on the concept of the Community Nurse Team. The team, made up of the Sister-in-Charge, Health Visitor/District Nurse and one State Enrolled Nurse, has overall responsibility for the nursing, health visiting and school nursing and primary socio-medical work among the health centre patients, including the provision of advice and health education.

At the end of the year there were seven more health visitors employed than in 1966, enabling some re-organisation of the districts and a reduction in case loads which now range from 300-600 families. In the 1966/67 course in the University of Bristol, 12 students were sponsored by the local health authority and all passed the examination. This was the first group to undertake the extended three months' practical period following the academic course and found it extremely valuable. Each student was given an area containing about 100 families and the Divisional

Nursing Officers and Centre Superintendents assisted with advice in management and the University tutors arranged one study day each month.

There is a changing pattern in home nursing, less acute work and more patients requiring long-term or terminal care. The present training for the pupil nurse is comprehensive and with the additional course in district nursing method, the enrolled nurse is equipped to play her full part in the community. It is envisaged in the future that the enrolled nurse will take responsibility for an area under the leadership of a Queen's Nurse and arrangements were made for four of the enrolled nurses already on the staff to attend this course of instruction.

The recording system for home nursing was revised with the object of enabling nurses to receive patients direct from general practitioners without the need to make further contact with the central office. The average number of hours a day spent on the district was 6.1 and visits to patients averaged two an hour, figures almost identical with those for 1966. Total visits for the year were 230,864, virtually unchanged for those of 1966.

The higher rates of visiting for the attached nurse were maintained and although the nurse originally carrying out these duties left in the autumn to get married it appeared from the reports of her successor that the benefits arising from the attachment continued. Further attachments of home nurses to general practitioners are planned.

Home Help Service

Studies have been made of various aspects of the service in different parts of the City. A saving of home help time in travelling and bus fares has been made and a better service given. Due to decentralisation more time has been devoted to the home helps and their problems. A badge engraved with the recipient's name, is awarded to home helps who have completed five years in the service and this has been greatly appreciated. Grouping of patients with one or more home helps has been carried out as each new block of flats for the aged was occupied.

An inservice training scheme was established, attracting recruits to the service with a resulting list of women waiting to enrol—a very satisfactory outcome.

The total number of people assisted has increased from 3,643 in 1961 by nearly 40 per cent to 5,086 in 1967, while the number of persons on the register at the end of the year increased from 2,366 in 1961 to 3,578 in 1967. Of all hours worked by home helps in 1967, 96 per cent were devoted to the assistance of old and chronically sick people.

Since 1963, the working week has been reduced, rates of pay have increased, and the cost of employing a home help has risen by approximately 21 per cent. Although in all county boroughs the average cost of treating a case has risen by this percentage, in Bristol the rise has been only 12 per cent.

Mental Health Services

Apart from one trainee social worker seconded to a course, at the end of the year there was a full complement of Senior Mental Welfare Officers, Mental Welfare Officers and Trainee Social Workers. For the first time, therefore, for several years, the districts were staffed with full teams of social workers and it was possible to give more attention to long-term case work.

During the year increasing difficulty was experienced in the workshop for the mentally sub-normal at Marlborough House because of the lack of working and

storage space. When the ambulance supply station in Snowdon Road, Fishponds, was vacated the workshop was moved to that building and occupied on the 20th November. No structural alterations were necessary and the new accommodation is much more suitable, particularly as it is easily accessible to motor vehicles which can be driven to the entrance. There are now 50 places instead of 24 provided at the Marlborough House site and a further addition is planned as there is ample room for development. At the end of the year 26 people (12 men and 14 women) were attending the workshop and it was not expected that there would be any difficulty in filling the remaining places. The contract for the assembly of hospital dressing packs continued and similar supporting contracts with Bristol manufacturers ensured a constant pressure of work and provided some variety in the tasks performed.

Ambulance Service

This was the first complete year of operation of the service from a central station housing all staff and vehicles and during the year 181,950 patients (an increase of 4,203) were conveyed to and from hospital involving journeys totalling 856,400 miles (an increase of 21,581). Ambulances responded speedily to a minor derailment on 11th January, 1967, and conveyed 8 people to hospital.

One of the ambulance staff, Driver Michael Mills, was awarded the Queen's Commendation for risking his life by rescuing a man from the bottom of a fermentation vat in one of the breweries in the City and the award was presented to him in London by the Minister of Labour, the Rt. Hon. Ray Gunter.

Mr. W. B. Fletcher contributed some interesting comments on the emergency ambulance service, demonstrating that 7 out of 10 patients were reached within 10 minutes of the receipt of the request and 9 out of 10 in less than 15 minutes. In only 2 cases in every 100 was there a waiting period of 20 minutes or more and the fact that the Central Ambulance Station is serving the southern part of the City did not seem to have affected materially the speed with which ambulances reached emergencies in that area.

Discussions have taken place on the possibility of conveying more accident cases to Frenchay Hospital with a view to relieving the Bristol Royal Infirmary.

Frenchay Hospital was already accepting an increased rate as a result of the closure of the emergency service at Cossham Hospital in May.

Co-operation in the Care of Old People

There is a closer liaison between health visitors and welfare officers in the community health and welfare of the elderly. In January 1966 a consultant physician, Dr. W. H. Lloyd, took up his duties as Co-ordinator of Geriatric Services and was employed jointly by the Health and Welfare Committees of the City Council, the Board of Governors of the United Bristol Hospitals and the South Western Regional Hospital Board.

Although the overall number of beds in Corporation old people's homes has not increased, it has been possible to transfer chronically sick residents to hospitals and to accept patients from hospital who were fit for discharge. A ward in Manor Park Hospital was converted, to be used partly as a pre-discharge unit and partly as a day hospital.

Occupational Health Service

The Occupational Health Service completed its third year of operation and an analysis is made of the pattern of people seen during the period.

Original work was carried out on refuse collectors' lung function with voluntary assistance by medical students.

An important new advance was made in setting up arrangements for supporting teachers who are under temporary strain. In view of the numbers potentially involved and the importance of these men and women, methods for participation of their unions in the future management of the Occupational Health Service should be investigated.

It is clear that overall demand has mounted to a point where resources are overstrained and the ability to fulfil all functions must be reviewed.

The primary aim of the service is to help employees; yet in view of the numbers helped to retain productivity, in spite of their health problems, there can be no doubt that on financial grounds alone the service is now more than covering its costs.

Environmental Health Services

One of the most important factors in achieving a record total of 116,851 visits was the work of the technical assistants who were appointed in 1966 and completed a full year's work. They relieved public health inspectors of time-consuming routine enquiries and enabled them to pay more attention to matters like food hygiene which require more professional training and experience.

Among the interesting events was the complaint of burns to the face and in some cases to the eyes by people present at an all night pedal car race organised in connection with the University Rag Week. The enquiry disclosed that the exposed skin and eyes of persons on and around the western end of the track had been contaminated by fine dust raised from gravel chippings laid down two years previously. The dust contained a considerable quantity of tar and some free tarry acids (phenols) were present. These are known to sensitise human skin to ultra-violet radiation. Arc welding equipment which is a powerful source of ultra-violet had been used at night, inadequately shielded, in the centre of the race track. The following morning was particularly sunny. The Rag Committee was advised of precautions to avoid a recurrence, including the shielding of welding apparatus and the provision of washing facilities and goggles for competitors.

There is an interesting section on noise, demonstrating how complaints have risen from negligible numbers in the years before 1939 to 143, involving 1,799 visits by public health inspectors, in 1967. Among the buildings investigated were a newly-opened ice rink, Bristol Royal Infirmary and the Central Health Clinic.

The implications of the Report* of the Sub-Committee of the Central Housing Advisory Committee on Standards of Housing Fitness (of which I was a member) were discussed during the year and in co-operation with other departments an area in the City was surveyed containing about 1,500 houses of which about 50 are likely to be demolished as unfit or unworthy of improvement. Among the amenities that were lacking were lock-up garages, off-street parking, play space for children, rest areas for the elderly and public conveniences. In order to provide the amenity features desired and to increase parking facilities, 127 improvable houses (or 7 per cent of the whole) would have to be demolished and yet 253 houses would still be without these facilities.

For several years, Bristol has provided a service to prospective purchasers of property who require guidance on the life of the house in which they were interested, with regard to possible slum clearance and planning proposals and about 1,600

*H.M.S.O. (1966), *Our Older Homes: A Call for Action*.

enquiries were received each year. In April 1967, the official search document was amended to include a compulsory question as to whether the property is situated in a location which may make it the subject of action under Part III of the Housing Act, 1957. The number of enquiries has increased to about 5,000 a year and of these nearly a quarter are in respect of new houses, void sites or properties other than houses.

Early in 1967 the Government carried out a national house condition survey to determine the numbers of unfit and substandard houses in England and Wales and it is gratifying that Mr. C. E. Bowden, a Bristol Specialist Public Health Inspector, was one of 26 inspectors seconded to the Ministry of Housing and Local Government for a period of six weeks.

The total number of animals slaughtered at the Public Abattoir fell slightly, mainly because the number of pigs was reduced by 20 per cent. Since the middle of September, Sunday slaughter has been almost a regular feature, principally because an abattoir outside the City has been closed and the Sunday slaughtering transferred to Gordon Road. During the year only 32 animals were sent in as reactors in the tuberculosis eradication scheme and postmortem examination revealed tuberculous lesions in 5 of the cattle.

About one-fifth of the samples of meat and offal from pet shops over the last five years were positive for Salmonella, but no case of human infection has been linked with the infected pet meat. It is probable that the housewife has profited from the publicity given to the potential dangers from pet meat and treated it in an hygienic manner.

The City and County of Bristol No. 8 Smoke Control Area was finally made in May, but the operative date was postponed until October 1969. A Clean Air Exhibition was staged during September in the exhibition hall of one of the City's principal departmental stores.

More progress was made in the administration of the Offices, Shops and Railway Premises Act, 1963, and although most complaints from employees tended to be in regard to temperature deficiency, other matters are now being raised. By the end of the year 4,951 premises had been visited, approximately two-thirds of the estimated number of premises to be dealt with before the initial general inspection of all offices and shops in the City is completed. The most common forms of offence were dirty premises, poorly ventilated work-rooms, absence of hand-rails on staircases, unsuitable sanitary conveniences and absence of running supplies of hot and warm water to washing facilities. During the year, 199 accidents were notified and 76 investigated.

Scientific Services

The Scientific Adviser was responsible for 11,964 examinations (including smoke recordings)—about the same as in 1966. More fertilisers and feeding stuffs were sampled and of 1,100 samples of milk examined for antibiotics 2.9 per cent were positive. Sampling in the Port increased by more than 250 to 1,350 samples, a record number of which the bulk were canned goods. An extensive survey disclosed that lead in the City water supply, examined after overnight standing, was well below the maximum laid down by the World Health Organisation. Considerable interest was shown by the press and television in the problem of urea formaldehyde fillings of teddy bears.

Health Centres

The Bristol Joint Advisory Committee for Health Centres was established during the year comprising three representatives each from the Local Medical Committee,

Bristol Executive Council, the Local Authority and one representative of the Local Dental Committee and of the house committees of the existing health centres. The South Western Regional Hospital Board and the Board of Governors of the United Bristol Hospitals were invited to nominate representatives. The new Committee met for the first time in November 1967 and approved the Health Committee's development plan for health centres. A circular from the Ministry of Health (7/67) dealing with the financial arrangements for doctors practising in health centres was under consideration at the end of the year.

The third health centre at Stockwood was opened to the public in September 1967 and officially opened on 24th November, 1967, by the Rt. Rev. Mervyn Stockwood, D.D., Lord Bishop of Southwark, a former Chairman of the Health Committee.

More work is being carried out at the William Budd and St. George Health Centres and there is an interesting report from Miss Rachel White, who was seconded by the Health Committee for social work training at Bristol College of Commerce, on co-operation with general practitioners and case work at St. George Health Centre.

Voluntary Organisations

Bristol Tuberculosis Voluntary Care Committee has, in recent years, extended its activities to include other diseases of the chest and heart and again in 1967 patients suffering from tuberculosis were a minority of those assisted. A third caravan has been acquired and during the year 52 adults and 27 children spent two weeks' holiday at Sandy Bay Caravan Camp, the W.R.V.S. providing transport by car to and from the camp. At Christmas nearly 200 people were given Christmas parcels and coal.

The booklet on "Drug Dependence" written by Dr. Antony J. Wood and published jointly by the Corporation of Bristol and Bristol Council of Social Service proved to be a "best seller". By the end of the year 15,000 copies had been distributed and a revised edition was being prepared.

Bristol Old People's Welfare (Incorporated) established a day centre for house-bound elderly people at Linden Close, Stockwood, two days a week. A very successful "Services for the Elderly" exhibition was organised by the Liaison Officer and was visited by more than 5,000 people in three days in April.

Veterinary Services

Anthrax was on two occasions introduced to the City through hides brought in for processing and on each occasion several days elapsed before the disease was diagnosed in the carcase. The affected hide had been transported with others, dressed, salted and handled by many workers and although the affected hide and those immediately contiguous were destroyed, the action taken was inevitably too late to minimise dangers to health. Constant vigilance on the part of the farmers and slaughter men is necessary and one hopeful outcome of these incidences was the acceptance of the offer of vaccination against Anthrax by workers at risk. Discussions continued on methods of pigeon control, but only limited action has been taken to deal with this nuisance.

Obituary

Mr. Edward C. Bartlett, Pharmacy Technician, died in hospital, at the age of 59 years after an operation, on 10th December, 1967. Mr. Bartlett had worked most efficiently in the Department since January 1944 and because of his pleasant and cheerful personality had endeared himself to all his colleagues. In addition he was

Secretary of the Bristol Centre of the St. John Ambulance Association and had done much to increase the numbers of people obtaining certificates of proficiency in first aid. Just before his death he was promoted to the rank of Officer Brother of the Most Venerable Order of the Hospital of St. John of Jerusalem.

Retirements

Miss Ursula B. Perrett retired prematurely on medical grounds from the post of Matron of Oakfield Road Day Nursery in March after more than eight years' service.

Miss Phyllis E. Peck retired as a senior member of the clinic clerical staff in November after nearly 22 years' service.

Among members of the dental staff, *Mr. Aubrey L. Wheeler* retired as Senior Dental Technician in September 1967 after working for the Corporation for more than 12 years and *Mr. John F. Sellin* retired as Dental Officer in August 1967 after more than 11 years.

Mr. G. E. Clothier, who held the post of Weather Observer at University of Bristol Research Station, Long Ashton, from 1940, retired in July. He contributed tabular information on meteorological records for inclusion in the Annual Report since 1957.

I am grateful to the many contributors to the Report, both named and unnamed, and to the whole of the staff of the Department who have given me loyal and willing service. The Chairman and Vice-Chairman of the Health Committee have shown whole-hearted support and I greatly appreciate the help and guidance I have received from fellow Chief Officers.

My Deputy, Dr. J. F. Skone, has edited and collated this Report.

I am your Obedient Servant,

R. C. WOFINDEN

THE HEALTH COMMITTEE, 1967

CHAIRMAN

Councillor W. H. ENGLAND
(To May 1967)

Alderman C. HEBBLETHWAITE
(From June 1967)

VICE-CHAIRMAN

Alderman Mrs. H. BLOOM
(To May 1967)

Councillor Mrs. G. C. BARROW
(from June 1967)

ALDERMEN

Alderman C. HEBBLETHWAITE

Alderman Mrs. H. BLOOM

COUNCILLORS

A. B. Abrams
Mrs. G. C. Barrow (to May 1967)
A. W. Barwood
W. E. Blackmore
K. I. Crawford
W. H. England (from June 1967)
M. R. Hulin
Mrs. D. M. Jackson

Mrs. P. M. Jacob, J.P.
G. B. Keeley
Miss I. M. Lobb, M.B.E.
Mrs. G. V. M. McCraw
H. F. G. Skeates
H. Trapnell, M.A.
G. W. Tucker (to May 1967)

PUBLIC HEALTH STAFF, 1967

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Senior Medical Officer—Maternal and Child Health : Sarah C. B. Walker, M.D. D.P.H.

Senior Medical Officer—Epidemiology : A. J. Rowland, M.B., D.P.H.

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SCIENTIFIC ADVISER

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VITAL STATISTICS & EPIDEMIOLOGY

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(Senior Medical Officer—Epidemiology)

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A. J. Wood, M.B., B.S., D.P.H.

(First Assistant Medical Officer)

H. R. Cayton, M.B., Ch.B., M.C.Path.

(Director of the Public Health Laboratory, Bristol)

Miss J. E. Adam

(Meteorological Officer, University of Bristol)

VITAL STATISTICS

	1967	1966	1965	1964	1963	1962
POPULATION						
(See note below)	429,020	429,370	430,900	432,070	433,920	434,260
AREA IN ACRES	27,073	27,073	26,350	26,350	26,350	26,350
NUMBER OF MARRIAGES	3,786	3,933	3,657	3,600	3,612	3,606
LIVE BIRTHS						
Legitimate M. 3,224 F. 3,037	6,261	6,587	6,859	6,852	6,939	6,662
Illegit. M. 377 F. 365	742	714	741	665	701	587
Illegit. expressed as percentage of all births ...	10·6%	9·8%	9·7%	8·8%	9·2%	8·1%
Total Births	7,003	7,301	7,600	7,517	7,640	7,249
Live Birth Rate (Crude) ...	16·3	17·0	17·6	17·4	17·6	16·7
Adjusted Birth Rate ...	16·8	17·5	18·1	17·9	18·1	16·7
STILLBIRTHS						
Legitimate M. 39 F. 40	79	98	109	82	112	111
Illegit. M. 6 F. 6	12	11	11	11	7	7
Total Stillbirths	91	109	120	93	119	118
Stillbirth Rate	12·8	14·7	15·5	12·2	15·3	16·0
Total Live and Stillbirths ...	7,094	7,410	7,720	7,610	7,759	7,367
INFANT DEATHS						
Infant Mortality Rate—Total	16·8	17·3	21·6	18·4	20·3	20·8
„ Legit. Births	16·5	17·2	21·4	17·5	19·5	20·0
„ Illeg. Births	20·2	18·2	22·9	27·1	28·5	30·7
Neo-Natal Mortality Rate ...	12·3	11·8	14·5	11·8	13·6	13·7
Early Neo-Natal Mortality Rate	10·7	10·7	12·5	10·4	12·6	12·0
Peri-Natal Mortality Rate ...	23·4	25·2	27·8	22·5	27·7	27·8
MATERNAL DEATHS						
Maternal Mortality Rate ...	—	0·54	0·26	0·26	—	0·14
DEATHS AT ALL AGES						
Male 2,548 Female 2,496	5,044	5,426	5,311	5,141	5,765	5,495
Death Rate (Crude) ...	11·8	12·6	12·3	11·9	13·3	12·7
Adjusted Death Rate ...	11·1	11·7	11·6	11·5	12·9	12·3

TABLE 1

**TOTAL DEATHS OF BRISTOL CITIZENS BY CAUSE AND AGE,
REGISTERED DURING THE CALENDAR YEAR 1967**

(Compiled from figures supplied by the Registrar General)

CAUSE OF DEATH								Sex	At all ages	0-	1-	5-	15-	45-	65-	75+
All Causes	...	...	...	...	...	...	...	M	2,548	67	9	17	122	751	760	822
								F	2,496	51	6	7	59	386	591	1,396
1. T.B. Respiratory	...	...	...	...	...	...	...	M	13	—	—	—	3	4	6	—
								F	1	—	—	—	—	1	—	—
2. T.B. Other	...	...	...	...	...	...	...	M	1	—	—	—	1	—	—	—
								F	—	—	—	—	—	—	—	—
3. Syphilitic Disease	...	...	...	...	...	...	...	M	7	—	—	—	—	2	4	1
								F	2	—	—	—	—	—	—	2
5. Whooping Cough	...	...	...	...	...	...	...	M	—	—	—	—	—	—	—	—
								F	1	1	—	—	—	—	—	—
6. Meningococcal Infection	...	...	...	...	...	...	...	M	1	—	—	1	—	—	—	—
								F	—	—	—	—	—	—	—	—
8. Measles	...	...	...	...	...	...	...	M	—	—	—	—	—	—	—	—
								F	1	—	—	—	—	—	1	—
9. Other Infective and Parasitic Diseases	...	...	...	...	...	...	...	M	3	—	—	2	—	—	—	1
								F	5	—	—	—	—	2	—	3
10. Malignant Neoplasm of Stomach	...	...	...	...	...	...	...	M	67	—	—	—	1	27	26	13
								F	65	—	—	—	2	11	17	35
11. „ „ „ Lung, Bronchus	...	...	...	...	...	...	...	M	233	—	—	—	5	97	94	37
								F	55	—	—	—	2	22	19	12
12. „ „ „ Breast	...	...	...	...	...	...	...	M	—	—	—	—	—	—	—	—
								F	97	—	—	—	3	43	27	24
13. „ „ „ Uterus	...	...	...	...	...	...	...	M	33	—	—	—	5	9	11	8
14. „ Other & Lymph. Neoplasms	...	...	...	...	...	...	...	M	251	—	1	1	15	92	80	62
								F	232	—	—	—	5	71	74	82
15. Leukaemia, Aleukaemia	...	...	...	...	...	...	...	M	13	1	1	2	—	4	2	3
								F	7	—	—	—	1	3	—	3
16. Diabetes	...	...	...	...	...	...	...	M	22	—	—	—	1	5	5	11
								F	20	—	—	—	—	2	8	10
17. Vascular Lesions of Nervous System	...	...	...	...	...	...	...	M	311	—	—	—	3	65	86	157
								F	497	—	—	—	7	50	94	346
18. Coronary Disease, Angina	...	...	...	...	...	...	...	M	697	—	—	—	20	270	225	182
								F	450	—	—	—	4	53	153	240
19. Hypertension with Heart Disease	...	...	...	...	...	...	...	M	23	—	—	—	—	6	9	8
								F	35	—	—	—	1	5	7	22
20. Other Heart Disease	...	...	...	...	...	...	...	M	182	—	—	2	4	32	42	102
								F	296	—	1	—	6	29	46	214
21. Other Circulatory Disease	...	...	...	...	...	...	...	M	103	—	—	—	1	25	26	51
								F	131	1	—	—	1	17	16	96
22. Influenza	...	...	...	...	...	...	...	M	2	—	—	—	—	—	—	2
								F	1	—	—	—	—	—	—	1
23. Pneumonia (including Pneu. of Newborn)	...	...	...	...	...	...	...	M	120	12	1	—	4	13	28	62
								F	189	10	—	1	—	13	33	132
24. Bronchitis	...	...	...	...	...	...	...	M	167	—	—	—	2	39	62	64
								F	42	2	—	—	1	3	12	24
25. Other Diseases of Respiratory System	...	...	...	...	...	...	...	M	28	—	—	—	2	7	10	9
								F	16	1	—	—	—	4	5	4
26. Ulcer of Stomach and Duodenum	...	...	...	...	...	...	...	M	23	—	—	—	—	7	10	6
								F	20	—	—	—	—	2	6	12
27. Gastritis, Enteritis and Diarrhoea	...	...	...	...	...	...	...	M	9	—	—	—	—	1	5	3
								F	31	2	—	—	—	3	8	18
28. Nephritis and Nephrosis	...	...	...	...	...	...	...	M	8	—	—	—	—	4	3	1
								F	12	—	—	—	3	1	5	3
29. Hyperplasia of Prostate	...	...	...	...	...	...	...	M	10	—	—	—	—	1	1	8
31. Congenital Malformations	...	...	...	...	...	...	...	M	27	16	1	3	3	2	1	1
								F	19	15	—	1	1	1	1	—
32. Other Defined and Ill-Defined Diseases	...	...	...	...	...	...	...	M	121	16	1	3	10	24	21	26
								F	141	19	2	—	8	22	28	62
33. Motor Vehicle Accidents	...	...	...	...	...	...	...	M	42	—	2	1	23	8	6	2
								F	15	—	1	1	1	4	3	5
34. All other Accidents	...	...	...	...	...	...	...	M	31	2	2	2	9	6	4	6
								F	58	—	2	4	1	5	11	35
35. Suicide	...	...	...	...	...	...	...	M	32	—	—	—	15	9	4	4
								F	23	—	—	—	5	10	6	2
36. Homicide and Operations of War	...	...	...	...	...	...	...	M	1	—	—	—	—	1	—	—
								F	1	—	—	—	—	—	—	1

TABLE 2

CAUSES OF DEATH REGISTERED DURING THE CALENDAR YEAR 1967

(Compiled from figures supplied by the Registrar General)

<i>Death Rate per million population</i>	<i>Cause of Death</i>								<i>No. of Deaths 1967</i>	<i>Per-cent of all Deaths</i>
33	1.	T.B. Respiratory ...	...	...	...	...	...	...	14	0.3
2	2.	T.B. Other ...	...	...	...	...	...	...	1	0.0
21	3.	Syphilitic diseases ...	...	...	...	...	...	...	9	0.2
2	5.	Whooping Cough ...	...	...	...	...	...	...	1	0.0
2	6.	Meningococcal Infection ...	...	...	...	...	...	...	1	0.0
2	8.	Measles ...	...	...	...	...	...	...	1	0.0
19	9.	Other Infective and Parasitic Diseases ...	...	...	...	...	...	...	8	0.2
308	10.	Malignant Neoplasm of Stomach ...	...	...	...	...	...	...	132	2.6
671	11.	" " Lung and Bronchus ...	...	...	...	...	...	...	288	5.7
226	12.	" " Breast ...	...	...	...	...	...	...	97	1.9
77	13.	" " Uterus ...	...	...	...	...	...	...	33	0.7
1,126	14.	Other Malignant and Lymphatic Neoplasms ...	...	...	...	...	...	...	483	9.6
47	15.	Leukaemia, Aleukaemia ...	...	...	...	...	...	...	20	0.4
98	16.	Diabetes ...	...	...	...	...	...	...	42	0.8
1,883	17.	Vascular Lesions of Nervous System ...	...	...	...	...	...	...	808	16.0
2,674	18.	Coronary Disease, Angina ...	...	...	...	...	...	...	1,147	22.7
135	19.	Hypertension with Heart Disease ...	...	...	...	...	...	...	58	1.1
1,114	20.	Other Heart Disease ...	...	...	...	...	...	...	478	9.5
545	21.	Other Circulatory Diseases ...	...	...	...	...	...	...	234	4.6
7	22.	Influenza ...	...	...	...	...	...	...	3	0.1
720	23.	Pneumonia ...	...	...	...	...	...	...	309	6.1
487	24.	Bronchitis ...	...	...	...	...	...	...	209	4.1
103	25.	Other Diseases of Respiratory System ...	...	...	...	...	...	...	44	0.9
100	26.	Ulcer of Stomach and Duodenum ...	...	...	...	...	...	...	43	0.9
93	27.	Gastritis, Enteritis and Diarrhoea ...	...	...	...	...	...	...	40	0.8
47	28.	Nephritis and Nephrosis ...	...	...	...	...	...	...	20	0.4
23	29.	Hyperplasia of Prostate ...	...	...	...	...	...	...	10	0.2
107	31.	Congenital Malformations ...	...	...	...	...	...	...	46	0.9
610	32.	Other defined and ill-defined diseases ...	...	...	...	...	...	...	262	5.2
133	33.	Motor Vehicle Accidents ...	...	...	...	...	...	...	57	1.1
207	34.	All Other Accidents ...	...	...	...	...	...	...	89	1.8
128	35.	Suicide ...	...	...	...	...	...	...	55	1.1
5	36.	Homicide and Operations of War ...	...	...	...	...	...	...	2	0.0

ALL CAUSES ... 5,044

NOTE—0.0 denotes less than 0.1 per-cent.

TABLE 3

INFANT MORTALITY (Local figures, corrected for transfers)

<i>1966</i>	<i>Cause of Death</i>	<i>1967 Total</i>	<i>First Day</i>	<i>From one day to under one week</i>	<i>From one week to four weeks</i>	<i>Total under four weeks</i>	<i>Total from one month to under twelve months</i>
20	Pneumonia (4 weeks plus) ...	18	—	—	—	—	18
8	*Pneumonia (newborn) ...	6	2	4	—	6	—
2	Bronchitis ...	2	—	—	—	—	2
—	Gastro enteritis (Neo natal) ...	1	—	—	1	1	—
3	Gastro enteritis (Post neo natal) ...	1	—	—	—	—	1
24	*Congenital malformations ...	27	5	9	5	19	8
8	*Birth injury ...	9	5	4	—	9	—
18	*Post natal asphyxia, atelectasis etc. ...	33	18	14	1	33	—
1	Other sepsis of newborn ...	—	—	—	—	—	—
4	Haemolytic disease of newborn ...	—	—	—	—	—	—
1	Haemorrhagic disease of newborn ...	—	—	—	—	—	—
3	*Other diseases of early infancy ...	3	3	—	—	3	—
23	*Immaturity ...	7	6	1	—	7	—
8	Other causes ...	11	—	4	4	8	3
123	TOTALS ...	118	39	36	11	86	32
Rate per 1,000 live births							
registered 1967 ...		16.8	5.6	5.1	1.6	12.3	4.6
Totals for 1966 ...		123	48	28	8	84	39
Rates for 1966 ...		16.8	6.6	3.8	1.1	11.5	5.3
Where there has been mention of immaturity							
			1967	...	34		
			1968	...	48		
Infant deaths in:— Hospitals ...				...	102	(includes 7 in hospitals outside Bristol)	
Private nursing homes ...				...	Nil		
Private residences, ambulances ...				...	16		

TABLE 4

INFECTIOUS DISEASES NOTIFIED DURING 1967 (Local figures)

NOTIFIABLE DISEASE	At all ages			Number of cases by age group							Incidence by quarters of 1967			
	1965	1966	1967	0-1	1-4	5-14	15-24	25-44	45-64	65+	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Dysentery	579	190	824	38	322	238	71	105	42	8	210	467	100	47
Acute Encephalitis	...	1	3	—	—	1	—	2	—	—	—	—	2	1
Erysipelas	29	20	19	—	—	—	1	—	16	2	5	7	3	4
Food Poisoning (Confirmed Cases)	146	55	82	6	16	15	13	19	9	4	13	9	29	31
Glandular Fever	154	118	162	—	11	35	101	14	1	—	51	44	38	29
Infectious Hepatitis	288	556	487	—	38	267	73	76	25	8	190	123	103	71
Malaria	...	1	1	—	—	—	1	—	—	—	1	—	—	—
Measles	5,564	3,530	3,721	183	2,232	1,304	1	1	—	—	2,302	1,058	257	104
Meningococcal infection	1	4	2	—	1	1	—	—	—	—	1	1	—	—
Ophthalmia Neonatorum	5	1	3	3	—	—	—	—	—	—	2	—	1	—
Paratyphoid	3	—	1	—	—	1	—	—	—	—	—	—	1	—
Typhoid	—	1	2	—	—	1	—	1	—	—	—	—	2	—
Pneumonia—Primary	67	68	53	6	10	6	5	7	10	9	20	12	10	11
—Influenzal	—	14	2	—	—	1	—	—	1	—	2	—	—	—
Puerperal Pyrexia	34	16	24	—	—	—	16	8	—	—	4	3	14	3
Acute Rheumatism (Under 16 yrs.)	33	11	8	—	—	8	—	—	—	—	3	2	1	2
(confirmed cases)	...	...	...	102	457	694	70	33	—	—	175	648	430	103
Rubella	539	198	1,356	1	120	188	12	3	—	—	118	133	42	31
Scarlet Fever	186	199	324	34	147	145	3	1	3	—	20	18	110	185
Whooping Cough	165	117	333	34	147	145	3	1	3	—	20	18	110	185

TABLE 5

TUBERCULOSIS NOTIFICATIONS

					CASES												
				Sex	At All Ages	Un- der one	1-	5-	10-	15-	20-	25-	35-	45-	55-	65 and over	
1967—																	
Pulmonary Tuberculosis																	
New notifications	...	...	...	M	42	—	—	3	1	2	2	8	7	1	6	12
				F	26	—	2	1	1	5	1	4	4	3	2	3	
Transfers from other areas	...	...	...	M	8	—	—	—	—	—	1	2	3	1	1	—
				F	2	—	—	—	—	—	—	2	—	—	—	—	
Deaths mentioning Tuberculosis, not notified	...	...	...	M	1	—	—	—	—	—	—	—	—	—	—	1
				F	2	—	—	—	—	—	—	—	—	—	1	1	
Non-pulmonary Tuberculosis																	
New notifications	...	...	...	M	7	—	1	1	—	—	—	1	2	1	1	—
				F	8	—	—	—	—	—	—	4	2	—	—	2	
Transfers from other areas	...	...	...	M	—	—	—	—	—	—	—	—	—	—	—	
				F	1	—	—	—	—	—	—	1	—	—	—	—	
Deaths mentioning Tuberculosis, not notified	...	...	...	M	1	—	—	—	—	—	1	—	—	—	—	—
				F	—	—	—	—	—	—	—	—	—	—	—	—	
New Notifications—																	
Pulmonary—																	
1966	...	...	...	M	47	—	—	—	—	—	4	5	7	10	11	10
				F	29	—	—	—	1	1	7	5	3	3	6	3	
1965	...	...	...	M	61	—	—	—	—	2	7	12	8	9	13	10
				F	26	—	—	—	—	3	3	2	4	5	4	5	
1964	...	...	...	M	108	—	1	—	2	4	7	22	16	17	20	19
				F	41	—	1	—	1	2	5	8	7	7	6	4	
1963	...	...	...	M	97	1	—	2	—	2	11	8	19	22	19	13
				F	45	—	2	1	1	2	9	10	8	7	4	1	
1962	...	...	...	M	89	—	3	2	2	4	4	12	14	17	19	12
				F	42	—	4	1	3	5	3	8	9	2	3	4	
Non-Pulmonary—																	
1966	...	...	...	M	3	—	—	—	—	—	—	—	—	2	1	—
				F	10	—	—	—	—	—	1	4	2	—	3	—	
1965	...	...	...	M	5	—	—	—	—	2	—	—	1	—	2	—
				F	7	—	—	—	—	—	1	1	2	3	—	—	
1964	...	...	...	M	10	—	—	—	—	—	2	3	4	1	—	—
				F	10	—	1	—	—	—	1	4	2	1	—	1	
1963	...	...	...	M	5	—	—	—	—	—	—	2	—	1	—	2
				F	16	—	2	1	—	—	3	5	2	1	1	1	
1962	...	...	...	M	2	—	—	—	1	—	—	—	—	—	—	1
				F	9	—	1	1	—	—	1	3	2	1	—	—	

TABLE 6

DEATHS FROM TUBERCULOSIS

(Registrar General's corrected figures)

<i>Year</i>	<i>Sex</i>	<i>At All Ages</i>	<i>Under One</i>	<i>1—</i>	<i>5—</i>	<i>15—</i>	<i>45—</i>	<i>65 and over</i>
PULMONARY TUBERCULOSIS—								
1967	M	13	—	—	—	3	4	6
	F	1	—	—	—	—	1	—
1966	M	11	—	—	—	—	7	4
	F	2	—	—	—	—	—	2
1965	M	12	—	—	—	1	1	10
	F	5	—	—	—	—	1	4
1964	M	10	—	—	—	1	5	4
	F	1	—	—	—	—	—	1
1963	M	10	—	—	—	—	4	6
	F	7	—	—	—	2	4	1
1962	M	14	—	—	—	2	8	4
	F	9	—	—	—	1	6	2
NON-PULMONARY TUBERCULOSIS—								
1967	M	1	—	—	—	1	—	—
	F	—	—	—	—	—	—	—
1966	M	2	—	—	—	—	2	—
	F	1	—	—	—	1	—	—
1965	M	1	—	—	—	1	—	—
	F	1	—	—	—	—	—	1
1964	M	1	—	—	—	—	—	1
	F	2	—	—	—	—	1	1
1963	M	1	—	—	—	—	—	1
	F	1	—	—	—	1	—	—
1962	M	2	—	—	—	—	1	1
	F	4	—	—	—	1	2	1

TABLE 7

ANALYSIS OF IMMUNOLOGICAL PROCEDURES COMPLETED DURING 1967/1966

	1967				1966			
	Under 5 yrs.	5-15 yrs.	Total under 16 yrs.	Administered by Local Auth'y. G.P.	Under 5 yrs.	5-15 yrs.	Total under 16 yrs.	Administered by Local Auth'y. G.P.
Diphtheria (whether combined with others or not)								
Primary Course	...	...	6,039	3,290	2,937	188	6,227	3,290
Booster	...	...	4,002	3,277	2,960	2,235	6,237	3,277
Whooping Cough (combined or not)								
Primary Course	...	...	5,935	3,178	2,886	129	6,064	3,178
Booster	...	...	3,299	1,947	2,324	972	4,271	1,947
Tetanus (combined or not)								
Primary Course	...	...	6,071	3,386	3,107	422	6,493	3,386
Booster	...	...	4,038	3,330	3,248	2,540	6,578	3,330
Poliomyelitis								
Primary Course	...	...	6,144	3,572	3,102	530	6,674	3,572
Booster	...	...	2,448	2,592	2,133	2,277	4,725	2,592
Measles								
	4,422	1,025	5,447	3,070	2,377			
	(vaccine not generally available until May)							
	1966							
						</		

MORTALITY

There were 5,044 deaths in 1967, and the resultant adjusted death rate was 11.1 per thousand mid-year population.

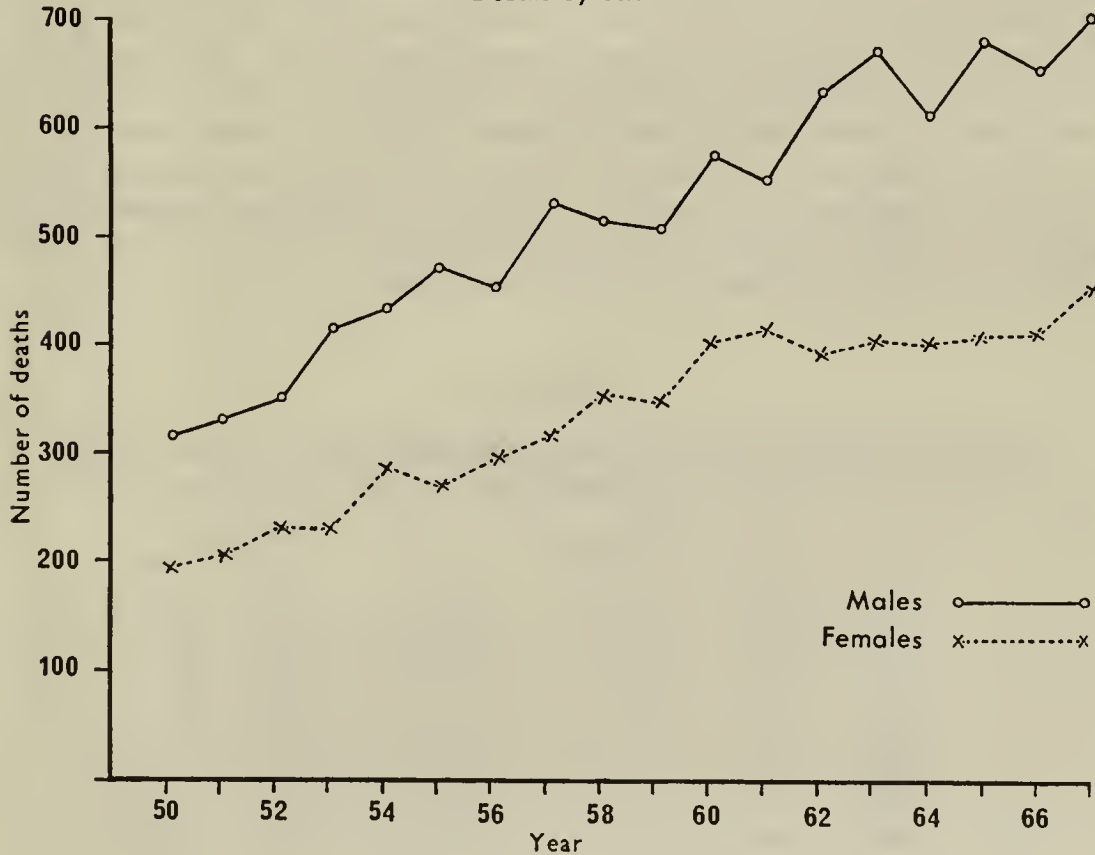
The rise in mortality from malignant disease of the respiratory tract—predominantly cancer of the lung—which has been noted in previous years continued, and there was also a rise in the number of deaths from suicide.

Although there was an apparent check in the rise of the death rate from coronary heart disease between 1963 and 1966, 1967 has seen a further rise so that the general upward trend has continued. The number of deaths due to accidents shows no great change this year as compared to last. There were two deaths from homicide.

CORONARY HEART DISEASE

In common with the experience throughout the country, Bristol deaths attributed to coronary disease have shown a steady increase over the years. Detailed figures were not published in Annual Reports before 1950, but since then, the number of deaths attributed to this cause has risen from 503 to 1,147, and the death rate has risen correspondingly from 1.1 per thousand population in 1950 to 2.7 per thousand in 1967. The rise in the death rate appeared to decline from 1963 to 1966 but there has since been a steady upward trend. The increase in the number of deaths has been less marked among females. These points are illustrated by figure 1.

Figure 1—Coronary Heart Disease in Bristol, 1950-67
Deaths by sex



Examination of the age and sex distributions of the increases shows that the steepest numerical increase has occurred among males between the ages of 45 and 64, while in women the main increase has occurred in the over 65 age group. In neither sex has a corresponding increase in deaths from this cause occurred under the age of 45, although there was a noteworthy isolated increase in the number of men under 45 dying of coronary disease in 1957—the year of the “Asian ‘flu” outbreak—which was succeeded by a smaller number of coronary deaths than usual in this age group in 1958. (See table 8.) It is well recognised that deaths due to cardiac and respiratory causes tend to show an increase during influenza epidemics.

Table 8

**DEATHS FROM CORONARY DISEASE OF MALES AGED 44 OR LESS,
1955 to 1960**

<i>Year</i>	<i>Number</i>	<i>Percentage of all male deaths from coronary disease</i>
1955	12	2.7
1956	10	2.2
1957	28	5.3
1958	7	1.3
1959	17	3.3
1960	17	3.0

LUNG CANCER

The number of deaths of Bristol citizens from lung cancer each year has also been showing a steady increase. This is shown in table 9. The marked preponderance of male deaths from this cause continues, although since 1961 the number of female deaths has shown a slight but sustained overall increase. The 1967 increase to 55 female deaths as compared with 36 in the previous year represents the largest upward jump in female deaths from this cause in Bristol in recent years.

The association of lung cancer with cigarette smoking is well known. The continuing high consumption of tobacco in the form of cigarettes despite this is an example of the great difficulty that is experienced in putting preventive measures into effect even when their potential value is recognised.

Table 9

**DEATHS OF BRISTOL CITIZENS FROM MALIGNANT NEOPLASM OF LUNG
AND BRONCHUS, 1950 to 1967**

<i>Year</i>	<i>Number of deaths</i>		<i>Year</i>	<i>Number of deaths</i>	
	<i>Males</i>	<i>Females</i>		<i>Males</i>	<i>Females</i>
1950	125	19	1959	196	18
1951	144	22	1960	180	22
1952	125	26	1961	171	38
1953	131	23	1962	188	23
1954	167	31	1963	199	26
1955	148	16	1964	203	33
1956	152	23	1965	193	29
1957	167	25	1966	203	36
1958	184	22	1967	233	55

ACCIDENTS

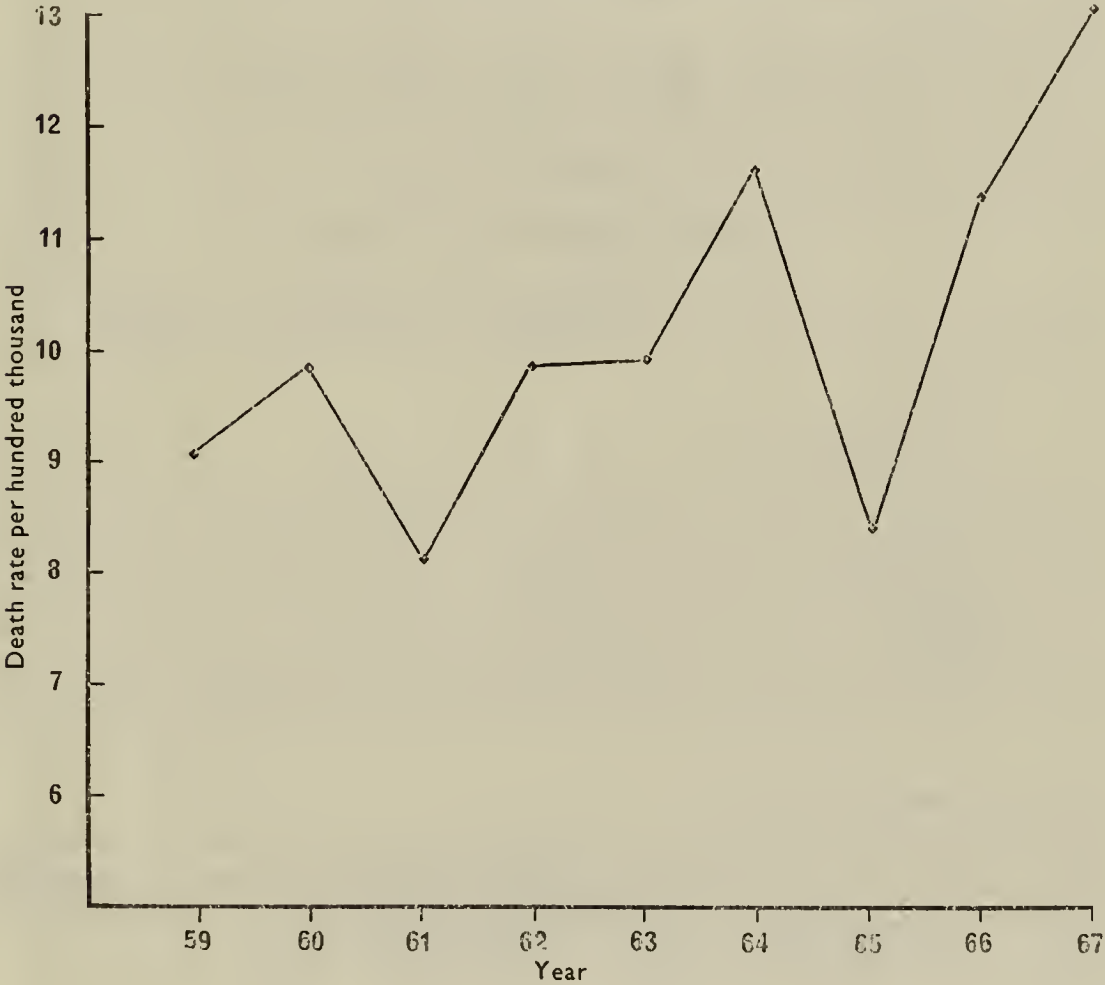
A total of 146 Bristol resident deaths were registered in 1967 as the result of an accident; 57 of these died on the roads, and 53 died as a result of a home accident. The figures for 1966 were very similar—145, 61 and 53 respectively.

SUICIDE

It is sad to note that the number of deaths in Bristol attributed to suicide has shown an increase for the second year in succession. As a result there has been a further rise in the death rate due to this cause. The graph (figure 2) shows the trend.

A comparison of the age and sex distribution of suicide deaths of 1966, and those of this year, shows an excess in persons aged 30–49 in 1967 (table 10).

Figure 2—Bristol deaths due to suicide, 1959-67
Death rates per hundred thousand estimated mid-year population



Twenty-two deaths in this age range were attributed to suicide in 1967, as compared with 12 in the previous year. The difference is accounted for largely by an increase of male suicides within this group from 7 in 1966 to 14 in 1967. Notably more deaths from barbiturate and narcotic poisoning were reported, and depression was more frequently mentioned as a cause in the coroner's certificate.

When numbers are small, care has to be taken in considering trends which might be due only to chance variations. However, a continuing watch will be

required on this particular problem in order to ensure that all possible preventive action is being taken.

Table 10

**BRISTOL SUICIDES 1966 AND 1967
AGE DISTRIBUTION**

<i>Age Group</i>	<i>Males</i>		<i>Females</i>		<i>Persons</i>	
	1966	1967	1966	1967	1966	1967
Under 20	3	0	0	0	3	0
20-29	4	4	1	1	5	5
30-39	4	6	0	3	4	9
40-49	3	8	5	5	8	13
50-59	4	4	7	7	11	11
60-69	5	6	4	6	9	12
70-79	3	1	4	3	7	4
80 or over	1	3	0	1	1	4
Totals	27	32	21	26	48	58

Table 11

BRISTOL SUICIDES 1966 AND 1967

			<i>Males</i>		<i>Females</i>		<i>Persons</i>	
			1966	1967	1966	1967	1966	1967
Poisoning:								
Aspirin	...	...	2	2	5	2	7	4
Barbiturates/Narcotics	...	...	1	7	7	9	8	16
Other solids	...	...	0	0	0	1	0	1
Coal gas	...	...	18	16	8	9	26	25
Jumping:								
from bridge	...	...	0	0	0	2	0	2
from gorge	...	...	2	0	0	1	2	1
Drowning	...	...	2	0	1	1	3	1
Hanging	...	...	2	6	0	1	2	7
Gunshot	...	...	0	1	0	0	0	1
Totals	...	...	27	32	21	26	48	58

INFECTIOUS DISEASES IN 1967

This year has been noteworthy for an increased incidence of scarlet fever, dysentery, rubella, whooping cough and aseptic meningitis. There have been no remarkable changes in the occurrence of other diseases, although the slow but steady reduction in the amount of tuberculosis in the city is being maintained.

Tuberculosis

The decline in notifications of tuberculosis shown in my reports for previous years has been sustained. Cases in young people are now less common; 20 per cent of all the cases coming freshly to notice in 1967 occurred in people under the age of 20.

Whooping Cough

More cases of whooping cough were notified during 1967 than in the two preceding years. The numbers of cases notified in the last five years are shown below:

Notifications of whooping cough

<i>Year</i>	<i>Number</i>
1963	312
1964	315
1965	165
1966	117
1967	333

Several young babies were infected, at a time of life when the disease is most dangerous. Since it is not possible to immunise children fully before they are over six months old, it is most important that the disease is controlled, by immunisation, amongst their older brothers and sisters, who might otherwise bring the infection home.

One death was reported, that of a five-month-old girl. The department holds no record of protection of the two older children in this family.

The rise in the incidence of whooping cough which has been noticed in various parts of the country in recent years has resulted in a re-examination of the efficacy of the whooping cough vaccines in current use. The work has been carried out by the Public Health Laboratory Service. The Bristol laboratory has been taking part in these investigations, and in co-operation, local authority nursing staff have been visiting notified cases and taking per-nasal swabs. The immunisation records of confirmed cases and their contacts have been scrutinised. It is expected that results will be published in due course.

In Bristol, isolations of *bordetella pertussis* were made mainly during the latter half of the year, when there was a noticeable rise in the numbers of notifications being received.

Dysentery

Considerably more notifications of dysentery were received this year than last, although it must be acknowledged that 1966 was an unusually quiet year as far as this infection was concerned. The total number of notifications received in 1967 was 824, compared with an average of 552 per annum over the ten years 1958 to 1967 inclusive (see table 12). There was undoubtedly an epidemic of the condition in the early part of the year; cases built up to a maximum notification rate of 57 in the week ending 7th May but had subsided to a much lower level by early July. This is shown in figure 3.

Table 12

DYSENTERY—BRISTOL C.B. 1958-67

<i>Year</i>	<i>Cases Notified</i>	<i>Year</i>	<i>Cases Notified</i>
1958	912	1963	849
1959	339	1964	544
1960	699	1965	579
1961	187	1966	190
1962	442	1967	824

The age distribution of notifications (see table 4) shows that the infection is most common in children, although it may well be that many cases in adolescents and adults never come to notice. The main precaution against this and other forms

Figure 3—Dysentery due to *Shigella Sonnei* — Bristol 1967



of infectious gastro-enteritis, which together account for a very large proportion of the day-to-day illness in the community, is strict attention to personal hygiene.

Salmonella Infections

A total of 82 infections due to salmonella were notified during 1967, 60 of these occurring from 1st July onward. The year has thus shown the characteristic pattern of incidence, most cases occurring in the warmer months. Since meat and meat products are the most important vehicles of this infection, careful checks are made on supplies of these items to households where infections occur.

There was one relatively small general outbreak of *S. brandenburg* infection. Cases occurred in various parts of the City between 5th and 11th July, and were found to be associated with one specific type of meat product. The source of the particular batch affected was traced to an abattoir near Bristol, and after the district medical officer concerned had been informed, suitable action was taken and no further primary cases due to this source occurred.

The serotypes of salmonella isolated during the year are shown in the following table.

Table 13
SALMONELLAE ISOLATED IN BRISTOL IN 1967

<i>S. typhimurium</i>	...	...	46
<i>S. brandenburg</i>	...	...	15
<i>S. panama</i>	...	...	11
<i>S. stanley</i>	...	...	4
<i>S. newport</i>	...	...	2
<i>S. haifa</i>	...	...	1
<i>S. enteritidis</i>	...	...	1

Fifteen family outbreaks of salmonella infection were investigated, ten of these caused by infection with *S. typhimurium*, three were infections due to *S. panama*, and two were caused by *S. stanley*.

Enteric fever

Two cases of typhoid fever, and one case of paratyphoid fever, occurred in Bristol in 1967. In addition, a carrier of *S. typhi* was discovered during a routine family check for Sonne dysentery.

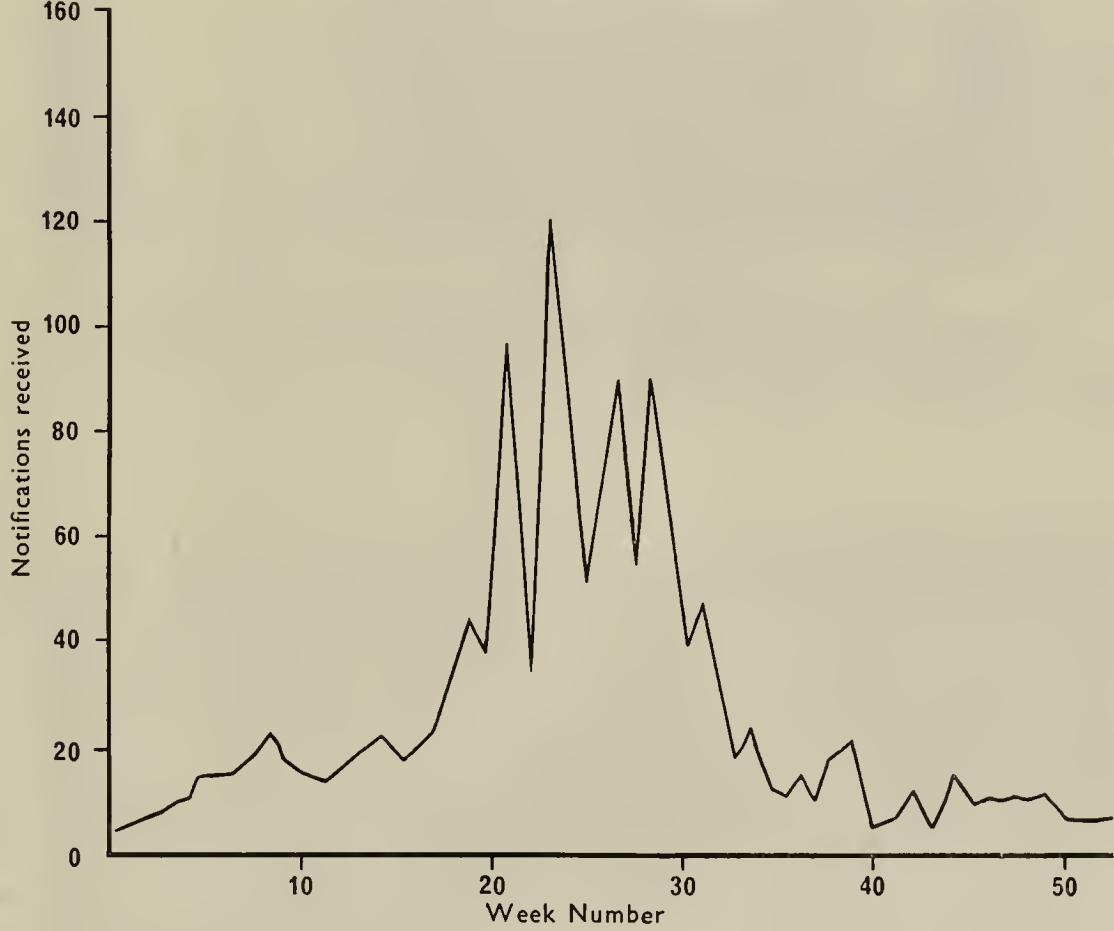
The cases of typhoid fever and paratyphoid fever occurred in people who had visited southern Europe for holidays without taking the precaution of having T.A.B.T. vaccination.

VIRUS INFECTIONS

Rubella

The number of notifications received this year, 1,356, was the highest since 1963. The age distribution of the notified cases and the distribution of the cases through the year are shown in table 4, and the graph (figure 4).

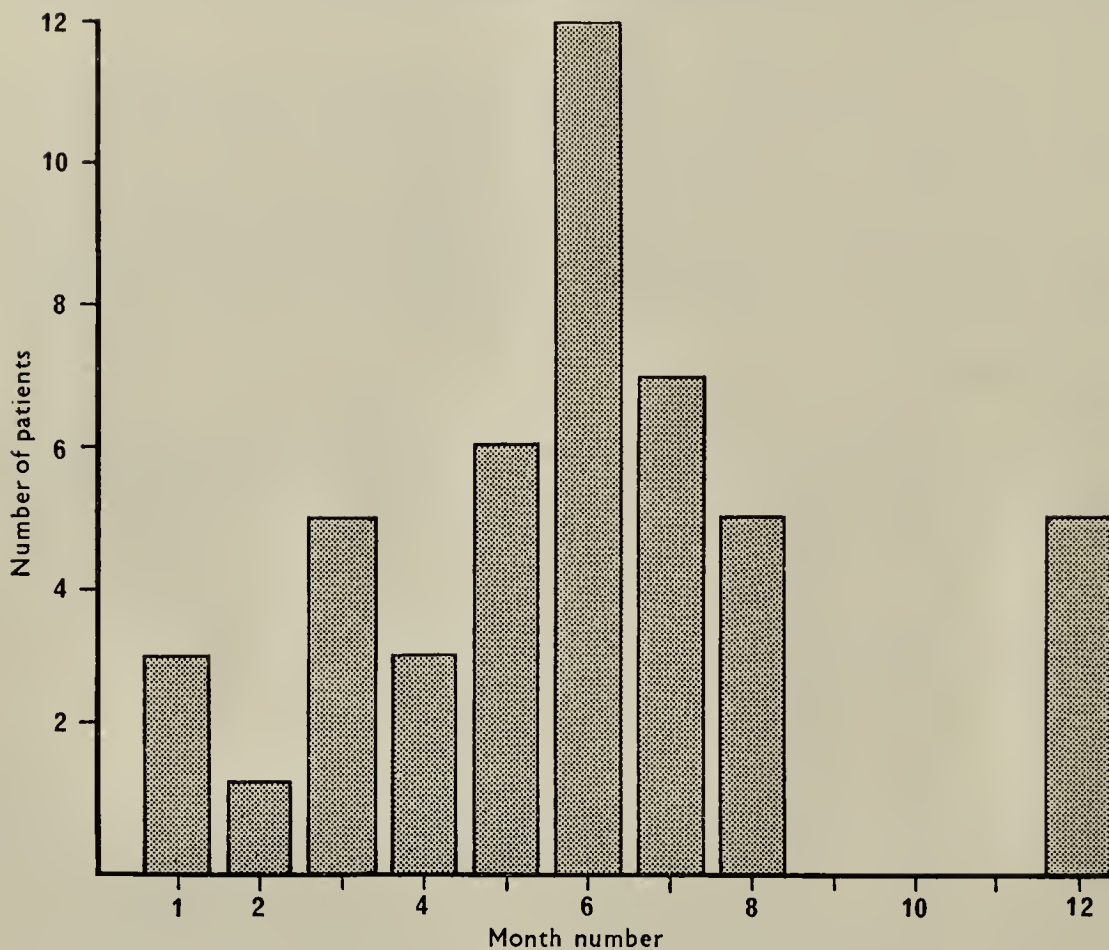
Figure 4—Rubella in Bristol 1967
Weekly Notifications



Public Health Laboratory Investigations

A small number of cases were investigated by the Bristol Public Health Laboratory. Isolations of rubella virus from nose and throat swabs are shown in figure 5, which shows the usual distribution in the first half of the year. The virus was isolated from

Figure 5—Laboratory Confirmation of Rubella
Bristol Public Health Laboratory 1967



The diagram shows the number of patients in each month from whom rubella virus was isolated.

about half the 73 patients aged four years and over, but from only two of 65 children below four years of age, although all those investigated had a clinical syndrome similar to that of rubella. A few of the children in the younger age group yielded coxsackie, echo, and adeno viruses, but it is thought that the majority were due to some as yet unidentified virus. These other causes of rubelliform illness probably account for so-called second attacks of rubella.

Sera from patients attending Granby House Antenatal Clinic were tested for rubella neutralising antibody. As will be seen from table 14 rubella antibodies were found at a significant titre in the serum of 85 per cent of patients who thought that they had been infected with the virus in the past, but it is noteworthy that antibodies were also found in 67 per cent of patients with no such history. It has been reported by workers in this field that infection with the rubella virus is often symptomless. Altogether 302 pregnant women were tested for rubella antibodies; 77 per cent of these were found to possess neutralising antibody at a level judged high enough to protect against a further infection.

Table 14

RUBELLA ANTIBODY IN SERA FROM GRANBY HOUSE CLINIC

			<i>Histroy of rubella</i>	
			<i>Yes</i>	<i>No</i>
All patients	...	...	33	54
Number with antibodies	...	...	28	36
Percentage with antibodies	...	...	85	67

Nineteen mothers in the first trimester of pregnancy came to the notice of the department during the year as contacts of cases of rubella. Doses of gamma globulin were administered by their family doctors as a precautionary measure. At the time of going to press, the outcome of fifteen of these is known. One has ended in a mis-carriage, the other fourteen infants were well at birth.

Influenza

During the last two weeks of December, sporadic cases of influenza began to occur in Bristol. At the same time there was a considerable upsurge of other forms of winter illness. Influenza occurred in a hostel for the elderly at Stapleton, where virological studies identified the virus as the A2 strain, similar antigenically to strains which had been prevalent in previous years. By the end of the year, experience in London and other large cities presaged a possible epidemic of influenza in Bristol, and careful note of the day-to-day occurrence of the condition as shown by the experience of general practitioners, and by work absenteeism in many of the larger commercial concerns and departmental stores, was being kept.

My thanks are due to those general practitioners, and industrial medical officers, and to the many others who so helpfully gave day-to-day information which enabled daily assessment of the situation to be made.

Measles

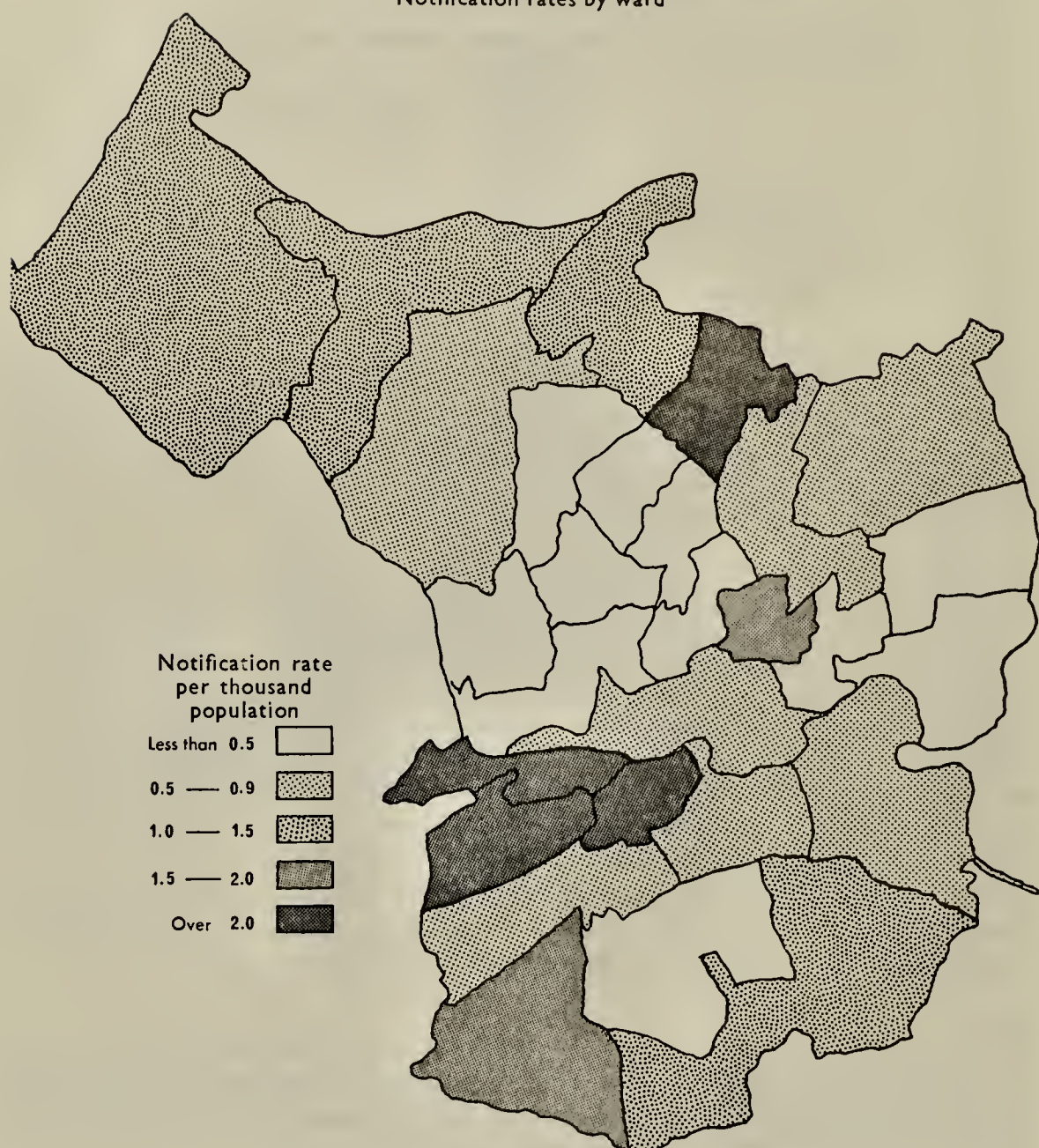
1967 was a "measles year." This year's epidemic was smaller than expected, and came to an end more abruptly than usual. Vaccination against measles was offered to young children in the city throughout the year. An account of the experience of measles vaccination is given on pages 37-39.

Infectious hepatitis

Notifications of infectious hepatitis for 1967 were slightly less than those for 1966. In view of the observations of the cyclical rise and fall of this condition which have been reported elsewhere it will be interesting to see if there is a fall in incidence over the coming year.

Cases were reported from most areas of the city, but, as in previous years, more cases occurred in areas where there has been new housing development. In these areas there are larger numbers of children, and circumstances of group play could play a part in transmission. The distribution by wards of the city is shown in the accompanying chart. The tendency for cases to occur along the northern edge and in the south westerly areas is clear.

Figure 6—Distribution of Infectious Hepatitis in Bristol 1967
Notification rates by ward



The age distribution of the cases, and the quarterly incidence, are shown in table 4. The following shows the numbers of cases reported in previous years:

<i>Year</i>	<i>Children*</i>	<i>Adults</i>	<i>Totals</i>
1961	738	222	960
1962	183	105	288
1963	38	74	112
1964	63	64	127
1965	179	109	288
1966	331	225	556
1967	305	182	487

*aged under 15 years

ENTEROVIRUS INFECTIONS

Aseptic meningitis and acute encephalitis

There were 44 admissions of Bristol residents to Ham Green Hospital attributed to aseptic meningitis and two admissions for acute primary encephalitis. These figures may be compared with 29 admissions for aseptic meningitis in 1966. Echo viruses were isolated from 12 and coxsackie from 5 of the 1967 cases.

The enteroviruses isolated from all cases of aseptic meningitis investigated by the Bristol Public Health Laboratory are shown in table 15, which also shows the age distribution. Not all these patients were resident in Bristol.

Table 15
Bristol Public Health Laboratory
Enteroviruses isolated from cases of Aseptic Meningitis

		Number of cases by age group							Total cases
Virus		0—	1—	5—	10—	15—	20—	30+	
Echo 30	...	—	—	6	1	4	2	—	13
Echo 19	...	1	—	3	—	3	2	—	9
Echo 6	...	1	2	—	—	—	1	—	4
Echo 3	...	—	—	—	1	—	—	—	1
Coxsackie A9	...	—	—	1	3	1	2	2	9
Coxsackie B2	...	—	1	—	—	—	1	—	2
Coxsackie B4	...	—	—	—	—	—	1	1	2
Coxsackie B3	...	—	—	1	—	—	—	—	1
Totals	...	2	3	11	5	8	9	3	41

Although the majority of isolations were made from cases presenting as aseptic meningitis, other syndromes, in particular Bornholm's disease, were noted during the year.

CONDITIONS OF UNKNOWN AETIOLOGY

Glandular Fever

	Notifications of glandular fever 1963–1967				
	0–4	5–14	15–24	25+	All ages
1963	3	31	67	18	119
1964	4	12	105	21	142
1965	6	34	101	13	154
1966	3	15	88	12	118
1967	11	35	101	15	162

All notifications are scrutinised by Dr. Macara, a member of the University staff who is conducting a special study of the disease. He visits selected cases after consulting with the general practitioner, and is especially interested in cases which present unusual features, or those where there is evidence of previous contact with other cases.

Epidemic vomiting

Two separate episodes of epidemic vomiting came to the notice of the department in 1967. The first, in an independent school for girls, occurred in March. A sudden outbreak of vomiting, which affected 64 out of 226 girls occurred, all 64 being

affected within the same 24 hours. Boarders and day girls, and also some of the resident staff, were affected.

		<i>Total</i>	<i>Affected</i>	<i>%</i>
Senior School—Boarders	...	190	56	29·5
Day	...	36	8	22·2
Resident staff	...	33	10	30·3

The frequency with which symptoms were reported amongst the 64 girls affected were: vomiting 82 per cent, abdominal pain 45 per cent, and diarrhoea 30 per cent.

No pathogenic organism which could be related to the outbreak was isolated from specimens of faeces taken from ten of the girls, and virus studies on nose and throat swabs also proved negative.

The second outbreak occurred in November, again in a girls' school. In this case 213 individuals out of a total of 628 at risk were affected. The pattern of the outbreak was typical, there being a history of a few sporadic cases during the two weeks before the main explosive outbreak. The principal symptoms complained of were vomiting, nausea or dizziness, headache, abdominal pain. The duration of the illness was short in most cases, but the vast majority of illnesses commenced within the same two days.

Again all bacteriological and virological investigations resulted in negative findings. Special search was made in this instance for any evidence of spread in the homes of the girls. None was found.

In both outbreaks, members of the kitchen staff had fallen ill immediately before the commencement of the main outbreak, although it was not possible to delineate any particular meal or foodstuff which was entirely associated with the cases.

VACCINATION AND IMMUNISATION

General

In April of 1967 the new scheme for the direct payment of doctors for immunisation procedures came into force, and there has been an increase in the number of procedures carried out by general practitioners. During the year 34,000 courses (primary and booster) were completed, of which almost half were done by general practitioners. In previous years the proportion undertaken by general practitioners was about 42 per cent. Detailed statistics for this year and last are shown in table 7.

Triple Vaccine

Primary vaccinations with triple vaccine were about 20 per cent higher than in 1966. Booster doses were also higher, being between 20 per cent and 30 per cent greater in respect of diphtheria and tetanus, but only 10 per cent more in respect of whooping cough.

Oral Polio

The increase in oral polio vaccinations was less marked for primary courses, being of the order of 10 per cent, but the number of booster doses almost doubled.

Booster doses at local authority clinics increased by over 60 per cent, whilst the general practitioners raised their figures by more than 150 per cent.

Smallpox

Having regard to the fact that there was no smallpox outbreak in the country in 1967, the number of vaccinations carried out was very encouraging, being only 10 per cent fewer than in the preceding year when there was a much publicised outbreak of smallpox in the Midlands.

TRIALS OF MEASLES VACCINE IN BRISTOL, 1966-67

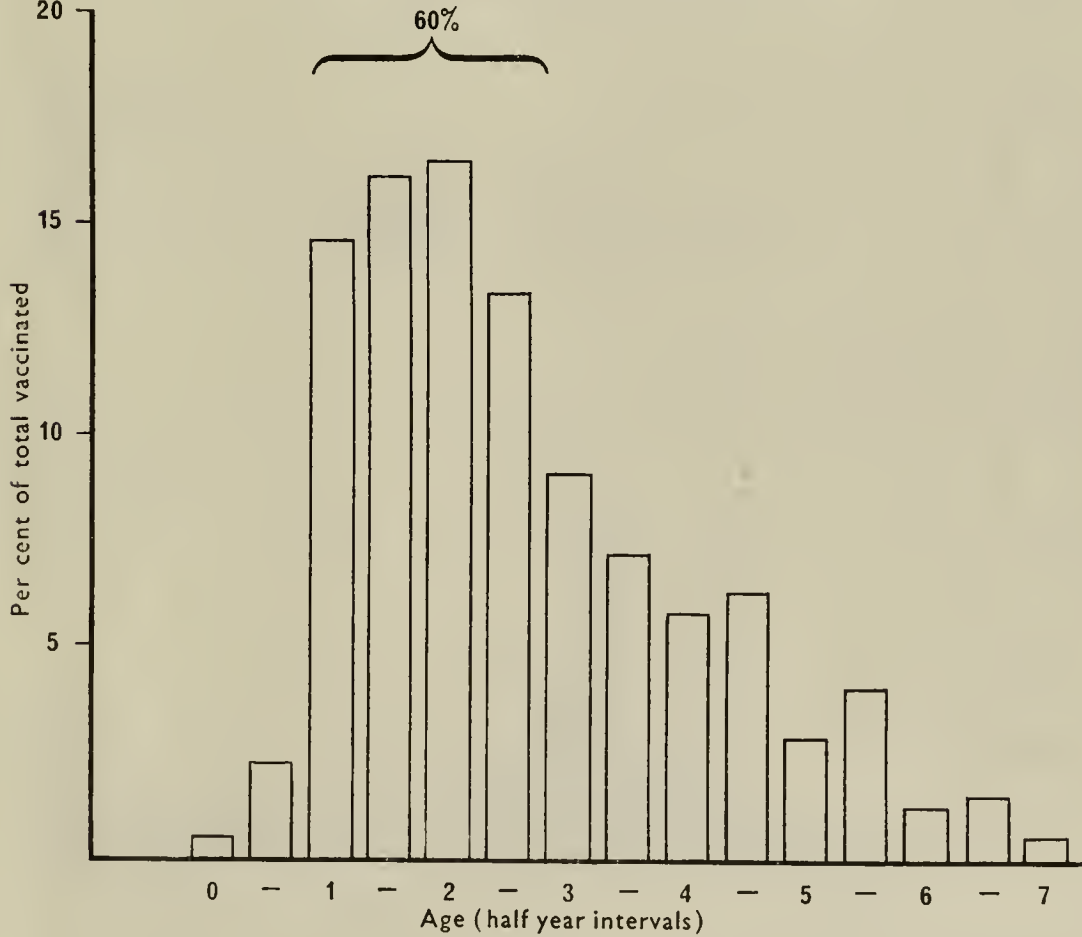
Since July 1966, Bristol's babies have been able to benefit from measles vaccination. Bristol has been one of the eight local health authorities which have been participating in a study, organised by the Medical Research Council, to compare the incidence of measles in communities which have aimed to immunise all infants and children between the ages of one and ten years with that in other communities, including Bristol, who have concentrated their efforts on infants in their second year of life.

Vaccinations

The vaccination technique adopted in Bristol was to give an initial injection of killed vaccine followed a month later by an injection of a live attenuated vaccine.

The campaign was launched in July 1966 with no intention of preventing the 1967 epidemic but to build up an immune population gradually by offering vaccination to children in their second year of life, although if parents wished it there was no objection to vaccinating older children who had no history of measles or previous measles vaccination.

Figure 7—Distribution of Vaccinations by age



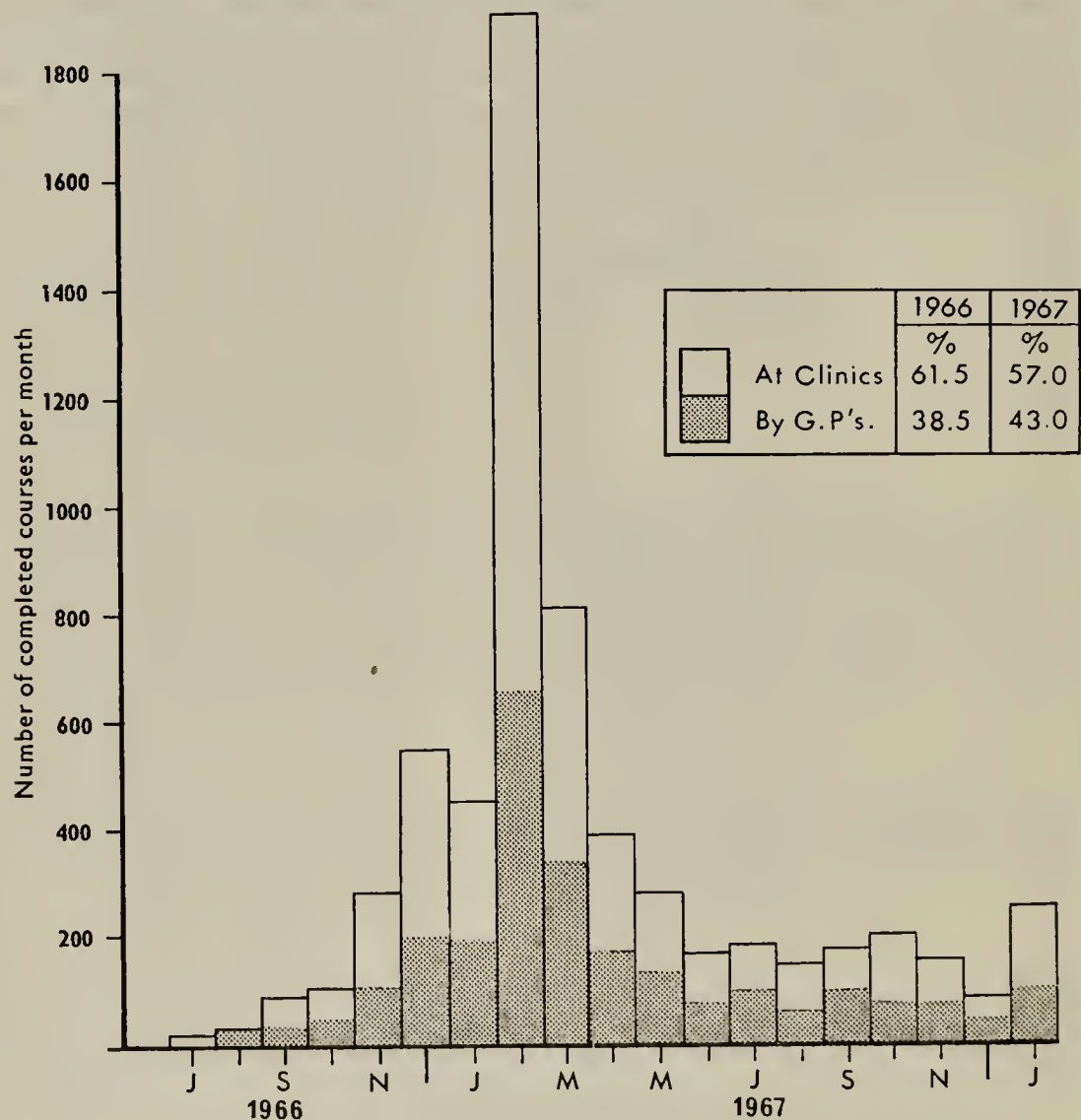
The demand for vaccination developed slowly. Press announcements and publicity were used to ensure a steady demand which would not be too heavy to overload clinic routine. The initial response was rather poor but when the epidemic made its appearance in the late autumn of 1966 it received unexpected publicity in press and on television which resulted in a sudden heavy demand for vaccination which necessitated extra clinic sessions. This demand decreased steadily as spring and summer approached.

Figure 8 shows that the policy of vaccinating infants in their second year was broadly successful.

Effectiveness of measles vaccination

Considering the period 1951–1966, excluding 1967 because of the influence of vaccination, the average number of measles notifications per year is 4,318; in an average epidemic year notifications total about 7,200, whilst an inter-epidemic year the total is approximately 1,500.

Figure 8—Measles Vaccination in Bristol 1966-67



A study of school medical records suggests that between 80 per cent and 88 per cent of children have had measles by the time of their first school medical inspection. The percentage varies from year to year. This gives an average of 85 per cent at the age of 5½ years. This figure is similar to that of 91 per cent at the age of 6 years obtained in a Newcastle study. If 90 per cent of children have had measles by 6 years, then about 39 per cent of cases have never been brought to the notice of the doctor for notification.

Table 16 shows the incidence of measles in the general population, and in the unvaccinated, partially vaccinated, and completely vaccinated children between the ages of 1 and 3 years for the epidemic nine months October 1966 to June 1967.

It can be seen that there is a slight protection conferred by the killed vaccine after a few weeks and that the protection is extremely effective two weeks after the live vaccine is given. Even though information about adverse reactions to vaccination was requested, only one complaint was received and occurred after the killed vaccine. Enquiries suggested that it was not of any great consequence.

Defaulters

An innate problem with a two-stage course is the problem of defaulters. Clinics had very different experiences in this matter, ranging from 2 per cent to 20 per cent of the total of completed courses, the average being 5 per cent.

For this reason and the fact that the use of live vaccine only has been so amply tested, it was agreed to change to the "single live" scheme from January 1st, 1968. It is anticipated that this will increase the vaccination rate.

Table 16
Effectiveness of Measles Vaccination
Bristol, October 1966—June 1967

Group			Number	Cases of Measles	Attack Rate Case/1000/Week	Protection Rate (per cent)
Total Population	...	...	429,320	4,151	0.2	—
Children 1–3 years						
Unvaccinated	...	...	16,042	1,782	3.3	—
				100		
				x — to		
				61		
				compensate for under-notification	= 5.4	
Vaccinated						
Killed vaccine only	...	...	3,950	86	5.5	Nil
Killed plus live						
1 week after live vaccine	...	...	3,758	11	2.9	65
1–2 weeks after live vaccine	...	...	3,747	2	0.5	91.1
2 or more weeks after live vaccine			3,745	7	0.1	98.2

Foreign Travel Clinic

As there was no outbreak of smallpox in the country during the year, the need to hold emergency sessions did not arise.

The number of cases seen at the weekly clinics during the year totalled 2,013 and a further 229 persons were dealt with, mainly at special sessions held at schools. The total attendances at all these sessions was 3,001, which is comparable with years when no special outbreaks arose.

Although yellow fever vaccination certificates are now valid for 10 years, compared with 6 years in 1963, there has only been a relatively small reduction in the number of travellers receiving this form of protection, viz.:

1963	—	1,002
1964	—	1,060
1965	—	1,142
1966	—	865
1967	—	970

Throughout the years the number of vaccinations given in respect of persons travelling on business has remained fairly constant at about 25 per cent. Emigrants, who originally accounted for about 5 per cent of the cases, have steadily increased and during 1967 equalled 14 per cent compared with 12 per cent in the previous year.

About two out of every five persons attending the clinic were going abroad on holiday. Most of these travellers received vaccination against smallpox, but it should be remembered that most of the vaccinations for foreign travel are given by general practitioners. Last year no fewer than 4,285 such certificates were issued by them, which is about five times as many as were issued at the special clinic. This proportion again has remained fairly constant over the years.

Almost three-quarters of the clinic attenders were travelling abroad by air. The proportion of air travellers has risen steadily since 1962 when the percentage was about half that of 1967.

METEOROLOGICAL RECORDS 1967

	Air Temperature (°C)				No. of ground frosts	Rainfall (")		Sunshine (Hours)		Soil Temperature at 0900 G.M.T.						
	Means A	Means B	Means of A & B	Diff. from normal		Max.	Min.	Total	Percent of Average	Most in a day	Daily Mean	Percent of Average	4"	8"	24"	
January	...	7.8	2.3	5.0	+0.4	13	-6	15	2.01	59	0.30	1.90	116	4.0	4.3	5.4
February	...	9.1	2.6	5.8	+1.0	12	-3	14	5.64	227	1.37	3.28	137	5.6	6.0	7.2
March	...	10.6	4.2	7.4	+0.8	14	-1	12	2.25	99	0.63	5.57	159	6.3	6.5	7.6
April	12.6	4.8	8.7	0.0	19	-3	7	1.16	52	0.29	4.26	82	8.1	8.1	8.9
May	14.6	7.0	10.8	-0.9	24	-2	4	5.77	234	0.88	5.78	86	11.7	11.2	11.9
June	19.2	10.2	14.7	+0.0	24	6	0	0.74	34	0.24	7.83	111	16.1	15.9	15.8
July	21.5	12.8	17.2	+0.8	28	8	0	2.13	69	0.41	7.23	126	18.1	17.7	18.1
August	...	20.2	11.5	15.9	-0.2	26	7	0	1.82	50	0.63	6.00	110	16.5	16.5	17.6
September	...	17.5	10.8	14.2	+0.3	20	5	0	5.38	167	1.04	4.44	104	14.0	14.2	15.9
October	...	14.2	8.8	11.6	+1.0	18	2	1	8.76	237	1.64	2.38	74	10.8	11.3	13.6
November	...	9.1	2.8	6.0	-1.1	13	-3	13	1.81	49	0.71	2.21	116	5.2	5.9	8.7
December	...	7.9	2.6	5.3	+0.1	13	-6	17	2.48	69	0.64	1.87	131	4.6	5.1	7.1

Figures supplied by courtesy of the University of Bristol's Department of Agriculture and Horticulture Research Station, Long Ashton.

VENEREAL DISEASE

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In 1966 there was an appreciable fall in the number of new cases seen in the Bristol Venereal Disease Clinics. This did not reflect the national trend and was due more to staffing inadequacies in the service locally than to a real decline in incidence in the city. The marked increase in total cases in 1967 over the previous year reflects both a real rise in incidence and greater success in contact tracing.

TABLE 1

NEW CASES — ALL CONDITIONS — BRISTOL CLINICS, 1961—1967

<i>Year</i>	<i>All Cases</i>	<i>Bristol Residents</i>
1961	2,967	2,277
1963	2,968	2,448
1965	4,404	3,635
1966	3,615	2,929
1967	4,154	3,463

SYPHILIS

Only four cases of early syphilis were seen in Bristol residents in 1967. A further 24 cases were seen at Avonmouth Dock Clinic. Only three cases of congenital syphilis were seen, all over the age of 15 years.

TABLE 2

NUMBER OF NEW CASES OF SYPHILIS SEEN AT BRISTOL CLINICS, 1959—1967

<i>Year</i>	<i>All Cases</i>			<i>Total</i>	<i>Bristol Residents</i>			<i>Total</i>
	<i>Early Syphilis</i>	<i>Late Syphilis</i>	<i>Congenital Syphilis</i>		<i>Early Syphilis</i>	<i>Late Syphilis</i>	<i>Congenital Syphilis</i>	
1959	26	7	—	33	10	6	—	16
1961	12	25	—	37	4	20	—	24
1963	31	33	—	64	14	28	—	42
1965	16	8	—	24	—	8	—	8
1966	24	9	4	37	10	9	4	23
1967	28	9	3	40	4	17	3	24

GONORRHOEA

In 1966 the incidence of Gonorrhoea in males seen at the Bristol Clinics showed no change over the previous year, whereas there was an apparent decline in incidence in females amounting to 24%.

That the drop in the number of new cases in 1966 was an apparent rather than a real decline in incidence in the city is made obvious by the very marked increase in the number of new cases, both male and female, seen in 1967. The number of male cases treated for Gonorrhoea in 1967 rose by 23.6% over the previous year while the corresponding increase in female patients was no less than 52%.

This is a measure of the efficiency of our contact tracing procedure since the appointment of Mrs. J. Merchant as a full-time Social Worker to the Service in March 1967.

TABLE 3

INCIDENCE OF GONORRHOEA — BRISTOL CLINICS, 1958—1967

<i>Year</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
1958	295	59	354
1962	429	148	577
1965	543	337	880
1966	538	255	793
1967	665	388	1,053

The proportion of young persons requiring treatment for Gonorrhoea continues to rise. Of the total male cases seen at the main Bristol clinic 10.5% were under the age of 20 years and of the female patients the proportion under the age of 20 years rose to nearly 40%.

TABLE 4

GONORRHOEA — BRISTOL 1959—1967
PERCENTAGE OF PATIENTS UNDER 20 YEARS

	<i>Males</i>	<i>Females</i>
	<i>Maudlin St. Clinic</i>	<i>Maudlin St. Southmead & Central Health Clinics</i>
1959	4.4	26.5
1960	4.5	26.1
1961	7.4	32.7
1962	7.0	20.0
1963	7.7	30.0
1964	10.0	34.5
1965	9.3	35.0
1966	9.1	32.2
1967	10.5	39.4

MATERNAL AND CHILD HEALTH SERVICE

Sarah Walker

(Senior Medical Officer, Maternal and Child Health Service)

In 1967 there were 7,003 live babies registered as born to Bristol mothers, giving a live birth rate of 16.8. This compares with 7,301 live births and a live birth rate of 17.0 in 1966. The infant mortality rate of 16.8 is the lowest ever recorded in the City; this compares with a provisional rate of 18.3 for England and Wales.

The still-birth rate for the City was 12.8 (14.7 in 1966) and the perinatal mortality rate was 23.4 compared with 25.2 in 1966.

For the second year on record, there were no maternal deaths; the previous year when there were no maternal deaths was in 1963.

Eighty-four per cent of babies were born in maternity hospitals or units, which is the highest rate yet recorded for institutional deliveries. Although only 16 per cent of babies were born at home, the number of mothers discharged early from hospital for home nursing, usually on the second day, remains high, as shown in the following table :

Early Discharges

1st-3rd day inclusive	1,012
4th-5th day inclusive	644
6th-8th day inclusive	397

In November, arrangements were introduced for the domiciliary midwife to take responsibility for the care of mother and baby for the first month in all domiciliary confinements, and in all hospital confinements where mother and baby are discharged home early. The health visitor continues to take responsibility for the mother and baby born in hospital, who returns home on or after the ninth day and who does not need the attention of a midwife.

In practice this means that approximately 50 per cent of the mothers and babies are followed up for the first month by the midwives and the other 50 per cent by the health visitors. Apart from maintaining, as far as possible, continuity of care during the first month of life, the scheme should enable more frequent home visits to be made during this important time.

With the agreement of the Health Committee, Southmead Hospital Management Committee, and the Local Medical Committee, a small pilot trial of a general practitioner short-stay delivery unit, based at Southmead Hospital, was started in mid-September. Details of the scheme are given under the section, Domiciliary Midwifery Service. The scheme, which is working well, provides first-class facilities for the delivery, and at the same time meets the wishes of the majority of mothers and their husbands for an early return home.

After consultation with the chest physicians, the obstetricians, with Professor Middlemiss, and the general practitioners, it was agreed to discontinue chest X-rays of expectant mothers as a routine procedure. This decision was reached as a result of the experience in recent years that the number of cases of pulmonary tuberculosis picked up as a result of routine X-rays, are now so infrequent that the practice can no longer be considered justifiable. Routine chest X-rays are, however, being retained for all immigrant expectant mothers or where there is a family history of tuberculosis.

The Family Planning Act, 1967, gives new powers to local health authorities in connection with contraceptive advice, and discussions are taking place with regard to the Department's future policy.

During 1967, 917 women (new patients) attended the City clinics for birth control advice; 783 of these attended the special clinic for the fitting of the intra-uterine contraceptive device. 2,570 attendances of old patients were made at clinics during the same period.

The Family Planning Association continue to hold sessions at six of the City's clinics.

Reference was made in last year's annual report to the facilities available in main health clinics/centres for cervical smear tests. During 1967, 5,182 smears were taken in the clinics, and of these 18 cases of carcinoma-in-situ were detected and dealt with by operative treatment.

Plans were formulated at the end of the year to give greater publicity to the service early in 1968, to encourage women to come forward for tests.

DOMICILIARY MIDWIFERY SERVICE

Miss W. A. Outram, Non-medical Supervisor of Midwives, reports :

The year 1967 is memorable in the Domiciliary Service of Bristol because of the opening in September of the Short-Stay Delivery Unit. This unit consists of one labour room with adjoining ancillary rooms, attached to the main delivery suite at the Maternity Department of Southmead Hospital. Here patients are taken and cared for by their domiciliary midwife and general practitioner, and return home accompanied by the midwife, within 2-3 hours following confinement. This scheme was originally proposed several years ago by Dr. J. Sluglett, a Bristol general practitioner, and Dr. Sarah Walker. It was made possible by the co-operation of Southmead Hospital and by the Professor of Obstetrics, then Professor G. Lennon, when a small suite of rooms became available in the hospital.

The general practitioners who use the unit are those who practice within a working range of Southmead Hospital, and are particularly interested in obstetrics. They were invited to partake in the scheme by the Local Medical Committee. Similarly the domiciliary midwives who use the unit are those working on districts in the area of Southmead—it being quite impractical to take patients from too great a distance to the hospital. The patients, as well as being “geographically suitable,” are those who would be suitable for a home confinement, since they are going to return home so soon following delivery.

It is considered that the Short-Stay Delivery Unit gives a mother all the advantages of the domiciliary midwifery service, combined with hospital confinement. The patient has her midwife and general practitioner, both known and familiar to her, having given care throughout pregnancy, with her during labour and at the birth of her baby. The facilities for our use in the hospital are excellent, and we are grateful for the co-operation and helpfulness of the hospital staff. Should there be any deviation in the normal progress of labour, the patient is already within the hospital and an emergency “on the spot” admission is easily arranged. The general practitioners who have used the Short-Stay Delivery Unit are most enthusiastic for all the advantages the scheme gives; the midwives also give their support and similarly appreciate the facilities of the unit. There were 21 patients delivered in the Short-

Stay Delivery Unit from its opening on the 18th of September until the end of December and all have been very satisfied with the scheme. All were anxious to be away from home and family for the minimum time of confinement, and welcomed the possibility of returning home with the new baby so soon following delivery; then of course being looked after at home by the same midwife and doctor.

We anticipate that the unit will be used more fully and more and more mothers will be taken care of in this way.

Domiciliary midwives delivered 1,167 babies at home during the year, which is 16 per cent of all births to Bristol residents. This shows a decrease in home confinements. Forty-one per cent of all Bristol residents who had hospital confinements came home to be looked after by the midwife. It is the link-up between the hospital and Domiciliary Service, whereby patients can be discharged early to the care of the district midwife and general practitioner, that enables the hospitals to make more beds available for the admission of patients. In all aspects there is and must be good liaison with the hospital service. This is clearly seen regarding the discharge of patients and their follow-up care; likewise the Domiciliary Service and general practitioners are concerned with the care of the patients prior to hospital admission.

With the training of nurse and midwife, there is a close link with the hospital training school. All student nurses spend a day with a district midwife observing her work with mothers and babies both in the home and in our clinics. As well as the pupil midwives who take the whole of the six-month Second Period Midwifery Training with the Domiciliary Midwifery Service, pupil midwives come from both the Bristol Maternity Hospital and from Southmead Hospital regularly at three-monthly intervals to take their district midwifery training.

Two midwives from the hospitals joined our staff during the year and this interchange of staff is helpful in the working together of both services.

Another outstanding change took place in November, whereby the midwife continues to care for both mother and baby for twenty-eight days. The midwife takes such care of all babies born at home and all those returned to home from hospital within eight days following birth.

The Short-Stay Delivery Unit, and the caring of the baby and mother by the midwife for twenty-eight days are major developments in the midwifery service and show progress in the domiciliary sphere.

SUB FERTILITY CLINIC

Dr. Norma Boxall reports on the work of the female clinic :

	1967	1966
New cases	260	267
Old Patients attending	1,298	1,236
Total	1,558	1,503
Marital difficulty	32	26
Pregnancies reported	96	93

The total number of patients attending have increased, with a small decrease in the new cases. The percentage of pregnancies reported has nevertheless increased. There has been a sharp increase in the number of marital problems.

There have been no new cases of tuberculosis this year. Again we have used the Heaf test as a screening for T.B., and so have avoided the use of so many guinea

pigs. The negative reactors have been offered a B.C.G. vaccination and many have accepted this and been referred to the Chest Clinic.

We have continued to have the valued help of Mr. Slater for our consultant sessions, Dr. Foss at the Male Sub Fertility Clinic and Dr. Pollard at the laboratory. Also, Mr. A. M. Fisher has kindly seen those of our patients who do not ovulate, at his special clinic, where, after further suitable tests, culdoscopies, hormone assays, etc., they have been treated either with clomiphene or gonadotropin (Pergonal). It is too early yet to assess results, as the numbers have been relatively few.

We are also participating in research into the cause of "honeymoon" cystitis (often very distressing) being done by Mr. Smith at the Bristol General Hospital. Again the numbers are small but the work encouraging, a urethral reflux of semen being a possible cause; many more cases will have to be collected.

An interesting experiment is being conducted as to the value of pre-natal propaganda for breast feeding on the mothers who have succeeded in becoming pregnant. So far, although again the numbers are small, all those who have been encouraged to do so have breast fed for 2 weeks to 2 months. Those not so encouraged have almost all failed to breast feed.

MALE CLINIC

Dr. George Foss reports :

During the year, 130 new patients have been seen. The total attendances have been 484 patients, over 48 sessions.

The 130 new cases are classified as follows :

Oligozoospermia and/or poor motility	56
Azoospermia	12
Normal spermatogenesis	17
Impotence	20
Marriage guidance	3
Advice re. sterilisation	2
Incomplete	20

In addition to seminal studies by Dr. Pollard, cases were further investigated by testicular biopsy at the Bristol General Hospital (38). Urines were collected in 24 or 48 hour batches, and assayed for hormone content at the Bristol Royal Infirmary or at the Endocrine Research Unit of the M.R.C. at Edinburgh. Blood testosterone assays were carried out at the Bristol Royal Infirmary. Some pituitary follicle stimulating hormone assays were carried out in America. Chromosome analyses were conducted by Dr. F. Lewis at Southmead.

During this last year the main emphasis in regard to treatment has been on the use of Clomiphene and Pergonal. After preliminary studies with Clomiphene before this year, a series of about 27 patients are now included in a controlled 6-month trial which has been organised all over the country.

Pergonal (human menopausal gonadotrophin) is being provided by Searle for the treatment of azoospermia or gross oligozoospermia, and so far 11 patients are having treatment. Enough material for 4 months costs £150 per patient, and so far only 3 have completed a course, with disappointing results.

Impotence. Surprisingly good results have been obtained by very large doses of testosterone at weekly intervals. A number of patients thought to have psychogenic impotence have been shown to have low blood testosterone levels, and weekly injec-

tions of 1,000 mg. will increase the prolonged blood level by a factor of 3–5, which seems in some cases to break the vicious circle and allow them to regain confidence.

Twelve patients in the last year have become fathers.

There is an increasing interest in donor insemination by the sterile male, but the difficulties in organisation have not yet been overcome.

CHILD HEALTH AND WELFARE SERVICE

The Sheldon Committee set up in 1964 to review the medical functions and medical staffing of child welfare centres, published its report in November, 1967. The Committee are in no doubt about the continuing need for a preventive service to safeguard the health of children, based on Child Health Clinics. In the long term, the Committee consider that this service will be part of a family health service provided by family doctors working in groups from purpose-built family health centres.

In Bristol, although general practitioners have for some years been offered facilities to undertake child welfare work for their own patients, in our clinics and health centres, only 36 are at present doing so. A few general practitioners in the City hold child welfare sessions in their own surgery premises. The problem is mainly one of time. Many more would like to undertake this work, but the shortage of medical manpower is already affecting the general practitioner service. The need for medical officers of the Local Health Authority in the Child Health Service therefore continues and those with special training have an important role in the periodic developmental assessment of the young child.

Apart from the special supervision and advice in the first year of life, parents are encouraged and special appointments sent out for children to attend for medical examination at the Child Health Clinics at or about the time of each birthday.

New records have been devised for use in our Child Health Clinics; these will come into use on 1st January, 1968. They are designed to record the physical, mental and emotional development of the child and to standardise the various screening and assessment procedures used by the doctors. A register is kept in the Maternal and Child Health Section of premature babies and babies who have been in the special care hospital units, so that a close follow-up can be maintained. A special medical examination of these babies is carried out at two years of age.

Our Abnormality Register, which includes children with congenital malformations and children with handicapping conditions, is referred to in the following report by Dr. Mary Gibson, Deputy Senior Medical Officer, Maternal and Child Health Service.

The Registry of Children Under Five with Congenital and Acquired Abnormalities

Information for this register is obtained from birth and death notifications, Coroners' reports, the discharge notes which come to the Medical Officer of Health when a baby leaves a maternity hospital or the care of the district midwife, hospital reports after in-patient or out-patient examinations, health visitors', etc.

Of these sources the one which continues to be very inaccurate and incomplete is the birth notification form—this is the more discouraging since it is upon this notification that the Ministry of Health has based its figures of the incidence of congenital abnormalities since this form of notification to the Ministry was instituted in 1963.

From 1st January, 1967, to 31st December, 1967, only 134 children were notified as having congenital abnormalities, whereas there are 537 children on the register for this period. Some of the difference is accounted for by conditions such as congenital heart disease, cerebral palsy, etc., which might not be apparent at birth—but many hare lips, spinabifida, cysticas and talipes which are obvious at birth are not notified.

Apart from the added support given in the home to the children and parents concerned, by health visitors' frequent supervision, the registry provides a quick and easy method for planning the special requirements needed for these children, including their correct school placing in the future.

Special investigations for which the registry is being used at the present time are :

1. The incidence of types of congenital abnormalities following the rubella outbreak of May, 1967.
2. The seasonal incidence of abnormalities.
3. The register was used as the main source for compiling the study register which was used for the Four-year Multiple Handicaps Report of the Sembal Trust of the Department of Child Health, University of Bristol. This investigation is now operative.
4. A source of information for the school medical department for cases of :
 - (a) spina bifida, to be used for correct placement of these children in nursery schools, or special schools.
 - (b) leukaemia.
5. The register is constantly used to obtain information on mentally handicapped children by the Mental Health Department.
6. The Department of Education and Science has made two or three enquiries into the number of children with thalidomide deformities and also an enquiry concerning children with dual blind and deaf handicaps.

The total number of children on the registry for 1967 (registered until 15th February, 1968), is 537. This number includes congenital abnormalities *per se*, children under observation for suspected abnormalities, a certain number of severe and less common diseases (e.g. tumours and leukaemias) and a number of children considered severely at risk as a consequence of their birth or neonatal history of such conditions as anoxia, hypocalcaemia and hypoglycaemia.

The figures for the more important congenital abnormalities are as follows :

CENTRAL NERVOUS SYSTEM

	<i>Total number</i>	<i>Female</i>	<i>Male</i>	<i>Stillbirths and Deaths</i> All naturally, stillbirths
<i>Anencephaly</i> (There was one further anencephalic which has been counted in the deaths from multiple abnormalities)	9	8	1	
<i>Spinabifida</i> 13 of these children had associated hydrocephalus, of whom 9 died.	26	19	7	15
<i>Hydrocephalus</i> without associated spinabifida	18	6	12	3
<i>Microcephaly</i>	4	3	1	2

ALIMENTARY SYSTEM

Cleft lip and/or palate	15	6	9	2
Intestinal atresias	6	1	5	—
Pyloric Stenosis	14	3	11	—

CARDIOVASCULAR SYSTEM

Specific cardiac lesions	37	21	16	7
Murmurs not so far classified	56	27	29	5
				also two further deaths counted in multiple abnormalities

LIMBS

Reduction deformities	6	2	4	2
Talipes	56	26	30	—
C.D.H. Treated	46	34	12	1
				(unrelated cause)
C.D.H. Not splinted	19	12	7	—
C.D.H. suspected because of clicking hip but not confirmed	19	14	5	—
MULTIPLE MALFORMATIONS	10	3	7	8
Mongols	8	6	2	—
Severely mentally retarded	13	6	7	—
Albinos	1	—	1	—
Phenylketonuria	1	1	—	—
Children especially at risk	19	9	10	—
Cretin	1	1	1	—
	(confirmed)	(unconfirmed)	(confirmed)	
	1			
	(unconfirmed)			

The figures for the more important acquired defects are given in the following table :

ACQUIRED ABNORMALITIES

	Total number	Female	Male	Stillbirths and Deaths
Central Nervous System				
Cerebral Palsy	7	3	4	—
Cardiovascular System				
Leukaemias	1	—	1	1
Sickle cell anaemia	2	—	2	—

Hearing Assessment Clinic

Dr. J. Kaye and Dr. Helen Gibb report :

The work of the Hearing Assessment Clinic, which has now been in existence for 10 years, has continued to show a steady expansion in both new referrals and attendances.

In the past few years our numbers have trebled. The established practice of screening tests for all babies in the City has contributed to the increase in new referrals.

While the bulk of children referred continues to come from the public health staff and consultants, we have been gratified to note that the general practitioners' referrals are increasing considerably. For example, five cases in 1963, two cases in 1964 and forty-one cases this year. These figures, we think, show the present trend

of close co-operation between public health and family doctors in the care and diagnosis of babies and young children.

The routine work of assessment of hearing in normal children presents comparatively few difficulties, but the child with multiple handicaps is much more difficult to assess, and often requires several attendances before diagnosis is established. Of recent years we have been seeing more of these children. Often they have normal hearing, but the development of their speech is delayed. Consequently our link with the speech team, with whom we share a psychologist, is an essential part of our investigation and a large number of children are referred to them.

Children with impaired hearing require specialised psychological assessment and Mr. G. W. Herbert, the educational psychologist, gives appropriate advice on their handicaps, abilities, and adjustment, and placement is then decided after discussion with the whole team. Mrs. S. Perks has recently been assisting Mr. Herbert in this work.

Apart from the diagnostic and follow-up work we continue the teaching of health visitors newly appointed to the Health Department. A refresher course has been given for health visitors previously trained.

The staff remains the same as in the previous year except for the appointment from September 1st, 1967, of a Teacher of the Deaf, Miss Zilla Watson, who works full-time in diagnostic and auditory training work. As she uses a car she is able to pay home and school visits in special cases requiring auditory training or assessment.

Figures relating to the work done at the Hearing Assessment Clinic for children under 5 years old, are given under M. & C.H. Statistics at the end of this section.

Children Under Five with Speech Difficulties

Dr. Isabel Price reports :

The rate of referral of children with poor speech development has remained about the same during 1967, at 38 new children. Almost 1 per cent of children reach the age of 3 without acquiring corrected speech and one would therefore expect about 60 in Bristol. However, this includes deaf children and those with the severer types of brain damage who will not usually be seen by the speech team.

The Delayed Speech Unit at St. James and St. Agnes Nursery School has remained fully occupied, dealing with children whose language is very retarded in spite of normal hearing and average or near average intelligence. Many are using only odd words at the most, when they begin after their third birthday, and have become either very frustrated and aggressive, or withdrawn and isolated. Our teacher, Miss Davies, "exchanged" with Mrs. Grace from America and this kept up a flow of ideas about the best ways of helping these children. Of the 5 children who left, 3 went to school or ordinary nursery, talking well, if not perfectly; one was transferred to special school in Somerset, still with a considerable handicap; and the fifth was unfortunately killed in a road accident. We have had to hold some children in the unit past their fifth birthday, because, although making progress, their speech is not understandable.

Day Nurseries

The following table shows the position at 31st December, 1967, of occupation and waiting list for the seven Day Nurseries in the City. Plans for the new Day Nursery in the central area to relieve the position have been approved and building should start next year.

<i>Accommodation</i>	<i>No. Children on Register</i>	<i>No. Children on Waiting List</i>
310 places	355	141

Playgroups

The Playgroup Movement in the City shows continued expansion. By the end of 1967 there were 70 Playgroups, about two-thirds of which are non-profit-making. All are registered with the Social Services Committee under the Nurseries and Child Minders' Regulation Act, 1948. There is a very active Bristol Playgroups Association affiliated to the National Association.

The Education Committee make a financial grant to the Bristol Playgroups Association, which the Association dispenses to the non-profit-making groups to assist with purchase of equipment, etc.

Since the playgroup movement started in Bristol many years ago, there has been very close liaison between the Health and Education Departments with regard to the running of these groups. Miss M. Parry, Inspector of Nursery and Infant Schools, has given every possible help and advice; for example, wherever possible a playgroup is linked with a Local Education Authority Nursery School or Class. This is an informal link but means that the headmistress takes an interest and can help and advise on play activities. In addition the Education Department organise a number of courses for playgroup leaders and those assisting in the groups.

Finally, tribute should be paid to the mothers themselves, who by their initiative and enterprise are responsible for starting and running these playgroups.

WELFARE OF UNMARRIED MOTHERS AND THEIR BABIES

In 1967 10.6 per cent of all live births to Bristol mothers were illegitimate, the highest incidence ever recorded in the City. This is a matter for concern, in particular for the children who start life at a disadvantage compared with those born into a stable and secure home with both parents.

There were 870 unmarried expectant mothers who came to the Department for help and advice during the course of the year; of these, 18 were under the age of 16 years.

The following information relates to arrangements made for the care of the babies born to 552 mothers during 1967.

1. Adoption—completed or pending	78	14.1%
2. Baby placed in care of Children's Dept. or a voluntary organisation	14	2.5%
3. Kept by mother		
(a) With support of family	197	83.4%
(b) Living apart from family	65	
(c) Living with putative father	109	
(d) Married	89	

These figures show the increasing trend of recent years for the unmarried mother to keep her child.

There were 78 admissions to the City Mother and Baby Home, Snowdon Road, and 2 admissions to St. Raphael's Home, during the year.

SPECIAL FAMILIES

Dr. C. D. Hopkins, First Assistant, Maternal and Child Health Service, reports :

On 31st December, 1967, there were about 1,000 names on the Special Register, thus confirming the impression of a slow, steady increase in the number of families in need of extra domiciliary visiting, and it is now a matter of some urgency to discover the reasons for this state of affairs.

As in previous years the increasing cost of living is responsible for many of the difficulties, particularly those arising from mothers working part-time so as to swell the family income. The community care of the mentally disabled is also, in certain cases, reacting unfavourably on the other members of the family unit, creating instability of the marital state and other inter-family relationships. The early marriage of present-day prosperous adolescents is frequently followed by parenthood of the emotionally immature, who may be unable to face up to the responsibilities of family life. Drug-taking and drug dependency is replacing pub-crawling as an adverse factor in family life, and there seems to be little action that can be taken to protect the families from the evil effects.

Great efforts are being made to adapt to prevailing conditions. Area Case Committees have been pruned and remodelled, and the coming year should see them once again contributing their share to the work with Special Families.

A great factor in the rehabilitation of families has been the facility afforded by the contraceptive clinics. The most difficult parents are treated with great understanding, and as a result many of the marriages are a lot more stable and the family relationships are less strained.

Special Families' health visitors and their welfare assistants are extending their activities, and are doing a lot to support difficult families, concentrating particularly on budgeting and on the early preventive work.

Special mention should be made of mothers' meetings now being held weekly in three of the four areas of the City. Children accompany their mothers and they all benefit greatly from meeting one another. This activity is developing into an effective form of group therapy, and it could be encouraged by the provision of more suitable accommodation with facilities both for laundering and cooking.

MATERNAL AND CHILD HEALTH STATISTICS, 1967

Live Births (from Birth Registrations)	...	...	...	...	...	7,003
Live Birth rate per 1,000 population	...	...	...	...	...	16.8
Illegitimate live births (per cent of total live births)	...	...	...	...	...	10.6%
Stillbirths	...	...	...	...	...	91
Stillbirth rate per 1,000 total (live and still) births	...	...	...	...	...	12.8
Total births (live and still)	...	...	...	...	...	7,094
Infant deaths	...	...	...	...	...	118
Infant mortality rate per 1,000 total live births	...	...	...	...	...	16.8
Legitimate infant mortality rate per 1,000 legitimate live births	...	...	...	...	...	16.5
Illegitimate infant mortality rate per 1,000 illegitimate live births	...	...	...	...	...	20.2
Neo-natal mortality rate (deaths under 4 weeks per 1,000 live births)	...	...	...	...	...	12.3
Early neo-natal mortality rate (deaths under one week per 1,000 total live births)	...	...	...	...	...	10.7
Perinatal mortality rate (stillbirths and deaths under one week combined, per 1,000 total live and still births)	...	...	...	...	...	23.4
Maternal deaths	...	...	...	...	...	Nil
Maternal mortality rate per 1,000 total live and stillbirths	...	...	...	...	...	Nil
Number of live premature births	...	...	...	...	...	480
Number of live and stillbirths at home (from birth notifications)	...	...	...	...	...	1,167
Number of live and stillbirths in institutions (from birth notifications)	...	...	...	...	...	5,643+499
					Inward Transfers	

(The above figures relate to Bristol residents)

Clinic Attendances

				<i>New Patients</i>	<i>Total attendances</i>
(a) <i>Antenatal</i>					
(i)	Medical Officers' sessions	...	...	433	2,938
(ii)	G.P. sessions	...	...	4,288	33,313
(iii)	Consultant sessions	...	...	2,700	8,005
(iv)	Midwives' sessions	...	...	484	3,195
(b) <i>Postnatal</i> (including birth control)					
	Medical Officers' and G.P. sessions	...	...	4,467	7,251
(c) <i>Child Welfare Clinics</i>					
(i)	Total number of infants under one year	...			9,259
	Total attendances of infants under one year	...			55,490
(ii)	Total number of children aged 1-5 years	...			10,723
	Total attendances of children aged 1-5 years	...			40,385
(d) <i>Parentcraft classes</i>					
	Number of expectant mothers who attended classes				1,757
	Total number of attendances	...	...		8,281
(d) <i>Special diagnostic clinic</i>					
(i)	New patients	...	...		465
(ii)	Attendances	...	...		650

Health Visiting

Home Visits :

(i)	Primary (to new babies)	...	...	7,345
(ii)	Infants under 1 year (excluding (i) above)	...		24,424
(iii)	Children 1-5 years	...	...	74,899
Sessions at clinics				5,998
Time spent at Nursery Schools and Classes				1,056 hours

Recuperative Convalescence

Section 22 N.H.S. Act—Mothers and Young Children

Mothers accompanied by children	...	...	3 mothers+5 children
Unaccompanied children	...	...	nil

Hearing Assessment Centre

The following figures relate to children under the age of 5 years :

Number of new cases seen	...	...	312
Number of old cases seen	...	...	119
Number of attendances at assessment by Medical Officers			502
Number of attendances for consultant otologist	...		95
Number of attendances for psychologist	...	...	57
Number referred for E.N.T. treatment	...	...	91
Number referred to the speech therapist	...	...	88
Number attending for auditory training	...	...	19

Analysis of New Cases

Number in risk group	...	...	128
Number profoundly deaf	...	...	3
Number with partial perceptive deafness	...	...	11
Number with partial conductive deafness	...	...	41
Number with no hearing loss but defective speech	...		89
Number with no significant hearing loss	...	...	152
Number with multiple handicaps	...	...	20

DENTAL HEALTH OF MOTHERS AND PRE-SCHOOL CHILDREN

Mr. J. McCaig, Chief Dental Officer, reports :

There has been little change in the volume of dental treatment for the Maternal and Child Health Section of the Dental Service this year. The treatment of pre-school children necessitates the mother bringing the child to the clinic, and there is a certain apathy amongst mothers to carry this out. It may be easy to pin-point the reasons for this apathy, if consideration is given to the time required to devote to this task of bringing young children to the dentist, and some mothers say quite frankly, nowadays, that they are too busy for this time-consuming procedure. The mothers are quite prepared to bring them for one visit, but when it is suggested that more visits are required, they are reluctant to agree in view of the fact that there appears to be nothing wrong with their children's teeth. It is very difficult to put over to mothers, the idea of preventive dentistry for pre-school children and the importance of the deciduous teeth is not fully realised. Many mothers are not convinced that deciduous teeth are important and quite wrongly feel that conservation of these teeth is a waste of time.

The scheme for sending out greetings cards to all 3-year-old children, which was started in 1963, was the subject of a study during the year and a summary of the findings is printed at the end of this report. As a result of this work it has been decided that future attempts to convince parents of the need to take their children to a dentist for inspection before the children go to school, will be done in association with certain routine visits by health visitors.

Preventive dentistry cannot be successful if young children's teeth are allowed to deteriorate beyond repair and parents are unable to devote the time for regular visits to the dentist. If this is the case, then the real answer to prevent dental disease, is to accept fluoridation in the public water supply so that young children will benefit. Fluoridation can give as much as 60 per cent protection against caries attack in young children and thus prevent multiple carious lesions in their teeth. With regard to the dental treatment of nursing mothers, now that they can receive treatment free from the dental practitioner service, it seems more rational for them to continue with that service, than to change over to the local authority service for the 2 years, when they are eligible for treatment from the latter service.

The work done for the Maternal and Child Health Section is tabulated.

DENTAL BIRTHDAY CARDS FOR 3-YEAR-OLDS

An Evaluation Study

A survey was undertaken during the year on the value of sending out, to 3-year-old children, specially purchased dental birthday cards with a view to encouraging parents to pay greater attention to teeth of these young children, particularly by having them checked by a dentist. It was known that more than half the children being examined at school in their first year had carious teeth and it was hoped that earlier inspections would help reduce this amount of dental decay.

It was decided that the simplest test was to find out whether the receipt of a dental card reminded the parent to take the child to a dentist for a check-up and any necessary action.

Method

All children born in March 1964 were sent a birthday card, after careful checking of address, etc., had been made, and as a result of this first action cards were sent to 629 children to reach them on their birthdays. It was found that 68 had moved from Bristol, so contact was made with 561.

Six weeks after the birthday card had been sent, an enquiry form was sent to the parent asking whether the child had been seen by a dentist and if so, at what age; if the child had not been seen, the parent was asked whether an appointment had been made. Follow-up letters were sent to the parents who failed to reply and in some cases the health visitor contacted the parent if no action was taken on the reminder letter. The total number of replies received was 510.

As a control group, the children born in April 1964 were similarly checked. They were not sent birthday cards, but 6 weeks after their birthday an enquiry form, similar to the one used for the March births, was sent and some 486 replies were duly received, from the 502 contacted.

Results

The broad findings are set out below :

<i>Dental Inspections</i>				<i>March birthdays (Birthday card and questionnaire)</i>	<i>April birthdays (Questionnaire only)</i>
(a)	Children seen before 3rd birthday	...		95 (18.6%)	93 (19.1%)
(b)	Seen within 6/8 weeks of birthday	...		74 (14.5%)	26 (5.3%)
(c)	Children not seen but with appointments before 4th birthday	...	...	79 (15.5%)	62 (12.8%)
(d)	Children where no action taken	...		262 (51.4%)	305 (62.8%)

It will be seen that the main effect of the birthday cards is shown in item (b) where there is a 9 per cent improvement likely to be the result of the initial card. This percentage is based on the actual replies received; if based on the actual contacts made, i.e. including parents who were unco-operative, or failed to reply in spite of reminders, the figure under (b) would be 13.2 per cent for the March births and 5.2 per cent for the April births—a difference of only 8 per cent. It is most unlikely that the parents who were unco-operative or who failed to reply would be likely to have taken any action as far as their children's teeth are concerned.

Future policy

As it is probable that there will be some introduction of planned visiting by the health visiting staff when children's records are finally held on the computer, it has been decided that a check on the teeth of 3-year-olds could be uniformly done at one of these visits. At the same time information on where inspections may be undertaken could readily be given by the health visitors, who, if necessary, could pass on requests for appointments to the dental department in those cases where mothers wished their children to be seen at the local authority clinics.

A special information leaflet has been prepared for this purpose and will be available to parents of all 3-year-olds when they are seen by health visitors at their homes or at the clinics. The practice of sending out dental birthday cards has now ceased.

*Full details of the survey is the subject of an article by Mr. W. B. Fletcher in *The Medical Officer* (1968) Vol. 119, pp. 312-314.

DENTAL SERVICES FOR EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER FIVE YEARS

Part A—Attendances and Treatment

	<i>Children 0-4 (incl.)</i>	<i>Expectant and Nursing Mothers</i>
Number of visits for treatment during year		
First visit	862	513
Subsequent visits	1,121	1,051
Total visits	1,983	1,564
Number of additional courses of treatment other than the first course commenced during the year ...	52	20
Treatment provided during the year:		
Number of fillings	1,324	922
Teeth filled	1,236	855
Teeth extracted	1,050	653
General anaesthetics given	429	85
Emergency visits by patients	89	40
Patients X-rayed	9	41
Patients treated by scaling and/or removal of stains from the teeth (prophylaxis)	108	276
Teeth otherwise conserved	468	—
Teeth root filled	—	4
Inlays	—	1
Crowns	—	—
Number of courses of treatment completed during the year	512	268

Part B—Prosthetics

Patients supplied with F.U. or F.L. (first time) ...	19
Patients supplied with other dentures	43
Number of dentures supplied	88

Part C—Anaesthetics

General anaesthetics administered by dental officers	—
--	---

Part D—Inspections

Number of patients given first inspections during year	1,316	540
Number of patients in A and D above who required treatment	857	478
Number of patients in B and E above who were offered treatment	838	467

Part E—Sessions

*Number of Dental Officer Sessions
(i.e. Equivalent Complete Half Days)
Devoted to Maternity and
Child Welfare Patients*

For treatment	741
For health education	152

NURSING SERVICES REPORT

Margaretta Marks Jones

(Chief Nursing Officer)

On the 31st December, 1967, the Department had in its employment:

- 4 Divisional Nursing Officers
- 3 Sister-in-charge, Health Centres
- 2 Deputy Sister-in-charge, Health Centres
- 16 Centre Superintendents
- 4 Health Visitors for Aged and Chronic Sick
- 4 Health Visitors for Special Families
- 8 Fieldwork Instructors
- 48 Full Time District Health Visitors
- 6 Part-Time District Health Visitors
- 60 Full Time Queen's District Sisters
- 4 Male Queen's District Nurses
- 9 Part-Time District Nurses
- 6 State Enrolled Nurses
- 6 Tuberculosis Visitors
- 8 Full Time Clinic Nurses
- 45 Sessional Clinic Nurses
- 16 Part-Time School Staff Nurses
- 9 Welfare Assistants
- 27 Full-Time Clinic Helpers
- 9 Part-Time Clinic Helpers
- 22 Clinic Assistants
- 3 Full-Time Senior Physiotherapists
- 1 Part-Time Senior Physiotherapist

This has been another year of steady progress in the domiciliary nursing service. More and more emphasis has been placed on the knowledge that community care as we know it today requires the concentrated efforts of all concerned. One cannot now overestimate the value of a close and harmonious relationship, not only between members of the domiciliary nursing service, but also between hospital, other local authority staff, family doctors and voluntary agencies.

Modern domiciliary care is carried out by an integrated team of family doctors, district nurses, midwives and health visitors. This co-ordinated pattern of working is, we know in Bristol, to be specially effective where nursing staff are working from a health centre. The opening of Bristol's third health centre at Stockwood gave us an opportunity of trying out a new pattern of nursing services in the area, based on the concept of the community nurse team. The team, comprising of sister-in-charge, health visitor/district nurse and one state enrolled nurse, has the overall responsibility for the nursing, health visiting and school nursing, and primary socio-medical work among the health centre patients, including the provision of advice and health education. It will be interesting to watch the result of this new pattern of service.

HEALTH VISITING SERVICE

It is encouraging to report that at the end of the year, there are seven additional members of staff employed in the health visiting service as compared to the previous

year. This enabled us to make some reorganisation of the districts to result in a reduced case load which now varies between 300 and 600 families.

The health visitors continue to undertake general duties connected with all aspects of the work of the Health Department, with the exception of four who undertake duties with special families, four with the aged and chronic sick, two who follow up the care of premature babies and another who helps with the after-care and rehabilitation with the patients from the Industrial Therapy Organisation. Reference to the health visitors and school staff nurses in the School Health Service, is contained in the Principal School Medical Officer's Report.

Advising the families in their own homes and health education are the main aspects of the health visitors' work. They continue to carry out the following screening procedures—the phenylketonuria test of urine, the test for congenital dislocation of hip and the screening test for hearing. These are all done during the first year of life.

RECRUITMENT

The main source of recruitment is still from our own training school. For the course 1966/67, twelve students were sponsored by the Health Department, all of whom were successful in passing the examination. This was the first group to undertake the extended three months' practical period following the academic course—all of whom found it extremely valuable. Each was given an area which consisted of approximately one hundred families. The Divisional Nursing Officers and Centre Superintendents assisted the students with advice in the management of their areas. The students kept in close contact with the training school and arrangements were made for one study day per month.

Four health visitors who completed their term of contract in September 1967 joined the permanent staff, and seven came from other local authorities. Ten left the authority for the following reasons—retirement one, transfer to Children's Department two, Tutor-Nursery Nurse Training College one, Administration Course one, other local authorities two, domestic reasons three.

REFRESHER COURSES AND IN-SERVICE TRAINING

Five health visitors attended a two-week course for Fieldwork Instructors arranged by either the Royal College of Nursing or the Health Visitors' Association. Also, many members of staff were given the opportunity to attend various day conferences which were very much appreciated. Arrangements were made for newly qualified and newly appointed health visitors to attend a course of training in hearing screening. This was taken, as in previous years, by Dr. H. Gibb and Dr. J. E. Kaye.

SPECIAL SURVEYS

During 1967, the health visitors participated in the following surveys:

Study of Iron Deficiency, Anaemia in Infancy—Bristol Royal Hospital for Sick Children.

Infective Hepatitis. Comparative Study of the Health of Immigrants and Local School Children—Bristol Department of Public Health.

Questionnaire on Milk for the Elderly—Queen Elizabeth College (University of London).

Multiple Handicap Survey—Department of Child Health and Public Health.

LIAISON WITH HOSPITALS

Health visitors are closely linked with local hospitals in many ways. Regular weekly visits are made to the Bristol Maternity Hospital—the health visitor concerned participates in the informal discussions arranged for mothers before they leave hospital; to Bristol Royal Hospital for Sick Children and to the paediatric ward of Southmead Hospital. Two health visitors are allocated to the follow-up of premature babies in their own homes and, thereby, have close contact with the premature units of the maternity hospitals.

Four health visitors who specialise in the aged and chronic sick have close liaison with the staff of the geriatric hospitals and have personal contact with the nursing staff, medical staff and medical social workers.

SPECIALISATION

Specialist Health Visitors for Aged and Chronic Sick and Night Watcher Service

See report on Care and After Care.

Chest Department

Domiciliary Visits and Sessions by T.B. Visitors:

	<i>B.C.G. Visits</i>	<i>Primary Visits</i>	<i>Other Visits</i>	<i>Total Visits</i>	<i>Clinic Sessions</i>
1966	626	152	3,733	5,384	1,602
1967	497	109	2,175	3,281	1,485

In March 1967, Mrs. U. Bradford, who had been Sister-in-charge of the out-patient clinic since 1954, retired. Her successor is Mrs. Vlaeminke, a member of Southmead Hospital staff. The appointment is in accordance with the overall plan of staff changes in the department.

The tuberculosis visitors continue to work in the out-patient clinics at Central Health Clinic and Southmead Hospital, also taking part in the B.C.G. vaccination programme in schools. As in the previous year, there was a marked decline in their case loads and for this reason, each of the tuberculosis visitors have some work in other clinics.

VISITORS TO THE DEPARTMENT

Students and pupils from the Nurse Training Schools continue to spend a day in the domiciliary field. A total of 388 student nurses and 38 pupil nurses accompanied health visitors and district nurses during the year. In addition, the following professional students were helped; six trainee general practitioners; seventeen Diploma in Public Health post-graduate students, fifty-one medical undergraduates, thirty-eight social studies and social administration students, twenty-six student district nurses and fifty-eight domiciliary midwives. This shows a total of 622 as compared to 468 in 1966.

ANCILLIARY NURSING SERVICE

An adequate establishment of clinic nurses, clinic helpers and clinic assistants was maintained during the year. These members of staff are invaluable in all aspects of clinic work that they undertake. Twenty-one clinic assistants were recruited during the year to “bridge the gap” between leaving school and before commencing nurse training. During this time they are given an insight into the type of duties

carried out by nursing staff, are given some initial training and, in return, render most valuable assistance in the health clinics.

A course of lectures is arranged by the health visitor tutors, which aims at giving the clinic assistants the knowledge of personal, family and community health.

Of twenty-one clinic assitants who reached the age of eighteen years during the year, thirteen commenced general nurse training, one commenced nursery nurse training, two were appointed as dental surgery assistants, one commenced occupational therapy training and four left for other miscellaneous posts.

Physiotherapists

During the year 1967, there was a full complement of staff of three full-time physiotherapists and one part-time, and the Department has extended the service to meet the demand within the City.

Work within the Welfare Service has doubled to incorporate a weekly session at the four newly opened homes for the aged.

Due to increasing demand for relaxation classes, the work has widened to include the recently opened Stockwood Health Centre.

The year has seen the inclusion of a weekly lecture to the Home Help Service on "Lifting Techniques," a skin clinic to be established at Lawrence Weston as well as existing treatments at the clinic for children of school age.

HOME NURSING SERVICE

Students trained during the year:

<i>January Course</i>		<i>September Course</i>	
Staff Students	11	Staff students	8
Counties students	4	Counties students	10
Total: 33			

Mode of travelling:

Car owners	75
Scooters	3
Cyclists	5
Walking	9

Organisation

The City is divided into 48 areas plus two group practice attachments and one attachment to a Health Centre.

The areas with Sisters-in-charge are in groups of four and each group has a Relief Sister to cover off duty. In addition, constantly busy areas have help from male nurses and State enrolled nurses either full or part-time.

Recruitment continues to be good. No advertising has been necessary for three years.

For some time we have been aware of the changing pattern of nursing care. There is less acute work, and more patients requiring long-term or terminal care.

The present syllabus of training for the pupil nurse is a comprehensive one and with the additional course of instruction in district nursing methods, the enrolled nurse is equipped to play her full part in the community. It is envisaged in the future that the enrolled nurse will take responsibility of an area under the leadership of the Queen's Nurse.

Arrangements were made for four of the enrolled nurses already on the staff to attend this course of instruction; one of the nurses was later attached to the new health centre at Stockwood.

REFRESHER COURSE

A Refresher Course was arranged for all staff from April 11th–17th, the highlight being visits to the hospitals in the City to observe new equipment and to hear about new techniques. We are grateful to the matrons for making these visits possible and to the hospital staff for all their help.

Arrangements were made throughout the year for an increasing number of students and visitors from overseas to accompany the staff for observation visits.

HOME NURSING STATISTICS

W. B. Fletcher

(First Assistant, Organisation and Records)

RECORDS SYSTEM

The revised record system, referred to in last year's report, has enabled comparable figures to be available for 1967. Some minor amendments in the collection of details of cases was agreed upon and will come into operation in 1968. The main reason for the change was to enable nurses to receive cases direct from general practitioners without the need to make further contact with the central office. If attachment of nurses to general practice increases, such a change will prove of special benefit.

NURSES' WORK RETURNS

The number of days worked by the staff was equivalent to almost 80 full-time nurses and shows no change from the previous year. On the basis of a 30-day month, a nurse worked $20\frac{1}{2}$ days, had $3\frac{1}{2}$ days' annual leave, rather more than $5\frac{1}{2}$ other days off and was sick for something under one day. The average hours per day spent on the district was 6.1, and visits to patients average two per hour. These figures are almost identical to those for the previous year. Total visits for the year were 230,864, which were virtually unchanged from those for 1966.

PATIENTS

Tables showing details of patients discharged during the year appear below. The age and sex distribution shows little change from 1966 although the total number of cases discharged was about 600 fewer. Almost 8 per cent of the patients discharged had been under continuous care for a period in excess of a year (6.7 per cent in 1966).

Of the cases discharged, approximately one quarter went into hospital and a fifth died. These proportions are similar to those recorded for the previous year.

HOME NURSE ATTACHMENT

No further attachment of home nurses to general practitioners took place during the year but provisional arrangements for an extension of the scheme in 1968 were

made. It is pleasing to record that the higher rate of visiting for the attached nurse during the second half of the attachment was maintained.

The nurse originally carrying out this special function left the service in the autumn on the occasion of her marriage and it appears from the early returns from her successor that the benefits arising out of the attachment will be well maintained.

TABLE 1
CASES DISCHARGED YEAR ENDED 31.12.67

Disease		Time on books to date discharged								
		1 week or less	1-4 weeks	1-3 mnths.	3-6 mnths.	6-9 mnths.	9-12 mnths.	1-3 years	3+ years	Total
Tuberculosis (all forms)	...	3	14	32	8	0	0	7	0	64
Other infectious diseases	...	13	23	8	1	0	0	1	0	46
Carcinoma of lung & bronchus		25	30	16	5	0	0	1	0	77
„ Breast & G/U System		4	14	9	2	4	0	5	0	38
„ Other sites	...	70	108	75	17	5	4	6	1	287
Diabetes	...	18	47	39	15	8	2	13	15	157
Allergic, endocrine, etc.	...	8	16	6	1	0	0	3	1	35
Blood, including anaemia	...	34	64	42	13	8	4	14	16	195
Mental disorders, etc.	...	4	5	2	1	2	1	2	1	18
Vascular diseases of C.N.S.	...	133	123	89	34	21	5	24	6	435
Other diseases—nervous system		7	21	18	11	5	3	12	4	81
Eye and ear	...	11	12	10	4	2	0	0	0	39
Heart & arteries	...	90	106	86	32	7	6	31	16	374
Veins	...	7	21	27	11	6	5	4	0	81
Bronchitis	...	70	33	14	7	3	0	6	0	133
Other respiratory	...	65	38	20	6	5	4	5	0	143
Digestive system	...	224	145	88	19	11	1	15	2	505
Urinary system & male genitals		23	37	15	8	0	2	1	0	86
Breast & female genital	...	23	40	12	3	2	2	3	3	88
Pregnancy & complications	...	40	115	24	2	0	1	2	0	184
Skin, tissue, etc.	...	41	68	45	20	10	3	12	4	203
Bones & joints	...	20	49	41	25	19	9	25	11	199
Cong. mal./dis. Early infancy		1	3	1	0	0	0	0	0	5
Senility	...	49	58	48	31	14	11	31	5	247
Injuries & reactions	...	30	65	41	11	5	2	11	4	169
Ill defined/not stated	...	222	27	12	2	1	1	4	2	271
Totals	...	1,235	1,282	820	289	138	66	238	91	4,160
%	...	29.7	30.8	19.7	6.9	3.3	1.6	5.7	2.2	100.0

TABLE 2

CASES DISCHARGED YEAR ENDING 31.12.67

<i>Disease</i>	<i>Total Cases</i>		<i>Visits</i>		<i>Average visits per case</i>
	%	<i>No.</i>	<i>No.</i>	%	
Tuberculosis (all forms) ...	1.5	64	2,838	1.6	44
Other infectious diseases ...	1.1	46	878	0.5	19
Carcinoma of lung and bronchus ...	1.9	77	1,781	1.0	23
Carcinoma of breast and G/U system	0.9	38	1,945	1.1	51
Carcinoma other sites ...	6.9	287	8,623	4.9	30
Diabetes ...	3.8	157	50,132	28.4	319
Allergic, endocrine, etc. ...	0.8	35	976	0.6	27
Blood, including anaemia ...	4.7	195	6,582	3.7	34
Mental disorders, etc. ...	0.4	18	880	0.5	49
Vascular disease of C.N.S. ...	10.5	435	16,151	9.1	37
Other diseases—nervous system ...	1.9	81	7,070	4.0	87
Eye and ear ...	0.9	39	1,574	0.9	40
Heart and arteries ...	9.0	374	15,201	8.6	41
Veins ...	1.9	81	3,426	1.9	42
Bronchitis ...	3.2	133	2,411	1.4	18
Other respiratory ...	3.4	143	3,339	1.9	23
Digestive system ...	12.1	505	10,119	5.7	20
Urinary system and male genital ...	2.1	86	1,627	0.9	19
Breast and female genitals ...	2.1	88	1,477	0.8	17
Pregnancy and complications ...	4.4	184	2,015	1.1	11
Skin, tissue, etc. ...	4.9	203	9,496	5.4	47
Bones and joints ...	4.8	199	11,293	6.4	57
Cong. mal./dis. early infancy ...	0.1	5	46	—	9
Senility ...	5.9	247	9,941	5.6	40
Injuries and reactions ...	4.1	169	4,856	2.7	29
Ill defined/not stated ...	6.5	271	2,142	1.2	8
Totals ...	100.0	4,160	176,819	100.0	43

TABLE 3

CASES DISCHARGED YEAR ENDING 31.12.67

<i>Disease</i>	<i>Total Cases</i>	<i>Discharge details</i>					
		<i>Males</i>	<i>Females</i>	<i>Disch'd.</i>	<i>Hospt.</i>	<i>Died</i>	<i>Other</i>
Tuberculosis (all forms) ...	64	38	26	50	7	1	6
Other infectious diseases ...	46	15	31	36	5	4	1
Carcinoma of lung and bronchus ...	77	60	17	3	23	49	2
Carcinoma of breast and G/U system	38	2	36	11	10	16	1
Carcinoma other sites ...	287	140	147	63	64	154	6
Diabetes ...	157	51	106	66	39	26	26
Allergic, endocrine, etc. ...	35	12	23	20	8	2	5
Blood, including anaemia ...	195	42	153	106	43	18	28
Mental disorders, etc. ...	18	7	11	4	12	2	0
Vascular diseases of C.N.S. ...	435	165	270	98	148	170	19
Other diseases—nervous system ...	81	26	55	26	29	14	12
Eye and ear ...	39	11	28	30	2	1	6
Heart and arteries ...	374	143	231	114	108	128	24
Veins ...	81	24	57	54	14	5	8
Bronchitis ...	133	66	67	76	28	21	8
Other respiratory ...	143	72	71	89	22	25	7
Digestive system ...	505	219	286	382	81	22	20
Urinary system and male genitals ...	86	52	34	48	16	15	7
Breast and female genitals ...	88	1	87	71	11	3	3
Pregnancy and complications ...	184	—	184	158	19	0	7
Skin, tissue, etc. ...	203	67	136	136	33	19	15
Bones and joints ...	199	41	158	86	61	26	26
Cong. mal./dis. early infancy ...	5	3	2	2	2	1	0
Senility ...	247	71	176	44	97	89	17
Injuries and reactions ...	169	57	112	117	33	10	9
Ill defined/not stated ...	271	117	154	75	184	11	1
Totals ...	4,160	1,502	2,658	1,965	1,099	832	264
% ...	100.0	36.1	63.9	47.2	26.4	20.0	6.3

TABLE 4

AGE GROUPS OF DISCHARGED PATIENTS

<i>Age (years)</i>			<i>Males</i>		<i>Females</i>		<i>Total</i>	
			<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
Under 5 ...	...	...	22	1.5	20	0.8	42	1.0
5-44 ...	...	...	217	14.4	485	18.2	702	16.9
45-64 ...	...	...	378	25.2	468	17.6	846	20.3
65 and over ...	...	...	877	58.4	1,671	62.9	2,548	61.2
Not stated ...	...	...	8	0.5	14	0.5	22	0.5
Totals			1,502	100.0	2,658	100.0	4,160	100.0

HOME HELP SERVICE

M. R. Epplestone, S.R.N., S.C.M., H.V.
(Home Help Superintendent)

During 1967, steady progress has been made within the Home Help Section. It has been possible to study various aspects of the service in the different parts of the City, and work accordingly. A saving of home help time in travelling and in bus fares has been made and a better service given. Also, more time has been devoted to the home helps and their problems. A badge, engraved with the recipient's name, is now awarded to home helps who have completed five years in the service, and this has been greatly appreciated.

THE WORK OF THE SERVICE

This has increased and an analysis of the patients helped during 1967 is shown below.

NATURE OF CASES

Confinements—230, a decrease of 34.

Young children to be cared for—182, an increase of 23.

Acute sickness—230, an increase of 47.

Elderly, chronic and infirm people over 65—4,071, an increase of 147.

Chronic sick under 65—357, an increase of 20.

Mentally disordered—5, no change.

Tuberculosis—11, no change.

The total number of patients needing help on 31st December, 1967, was 3,578. The total number of cases helped over the year was 5,086, an increase of 199 over 1966.

Visits paid by the Deputy and Divisional Organisers have increased by 604.

RECRUITMENT

It has not been necessary to advertise as there has been a list of people wishing to become home helps.

The total number of home helps on 31st December, 1967, was 15 full-time (40-hour workers) and 710 part-time (20-hour workers).

Home helps appointed this year numbered 224—an increase of 47, and 193 left. Last year 205 left.

An analysis of the reasons for leaving is shown below:

Ill-health	48	Work unsuitable	7
Pregnancy	5	Home helps unsuitable	5
Other work	10	Transferred to other departments	6
Leaving district	7	Deaths	1
No reason given	59	Domestic reasons	32
Resigned	7	Dismissed	6
			<hr/>
			Total 193

STAFF

There have been two changes this year.

One Divisional Organiser from the Central Area left to take up a similar post in a county. A new appointment was made and the Divisional Organiser took up her duties in November.

A General Assistant transferred to the Central Clinie as a clerk, a post she had held previously, and a new appointment was made.

Due to the new Social Security Act, the work of the General Assistants has been increased considerably, as all patients receiving help had to be re-assessed. This entailed a great deal of time, as well as patience, as most elderly people regard this as an intrusion into their private affairs, but as the service is not free, it is essential that details of income should be revealed, if full cost is not paid. The Assistants have been most forbearing and tactful in their approach, and few complaints have been registered.

ADMINISTRATION

In April, an experimental course of in-service training took place. New entrants to the service were given a two weeks' course—two hours' theoretical instruction, followed by two hours' practical work. This proved to be very successful and was greatly enjoyed.

Slight alterations were made to the programme and four further courses given. The average attendance was sixteen, and the number who left at the end averaged one per course.

Next year it is hoped to start refresher courses for home helps who have been in the service five or more years, and by the end of 1968, all home helps should have received some form of training or attended a refresher course. The aim being to provide a better standard of service and a reduction in the number of resignations.

HEALTH EDUCATION

P. Mackintosh

(Health Education Officer)

Staff

Miss Roberts, who was appointed Assistant Health Education Officer in September 1966, resigned early in the year to take up another appointment. Mr. Michael Head was appointed to fill the vacancy and commenced duties in August. Mr. Head is a former teacher of physical education and has some experience of youth work; with his background and knowledge it is hoped that health education activities will be extended among school children and young people.

Conferences

In April, the Health Education Officer attended a three-day conference at the University of Technology, Loughborough; this was a combined conference, organised jointly by the Society of Medical Officers of Health, the Association of Teachers in Colleges and Departments of Education and the Central Council for Health Education. The Deputy Health Education Officer attended the Summer School of the Central Council held in Bangor, North Wales, in August.

A refresher course for District Nurses was held at the Central Clinic from the 13th to 19th April. Several distinguished speakers presented a varied and stimulating programme of lectures; one afternoon was given to observation visits to five Bristol hospitals.

Booklet—" Drug Dependence "

In June, a booklet entitled "Drug Dependence" and written by Dr. Antony J. Wood, First Assistant Medical Officer, was published jointly by the Health Department and the Bristol Council of Social Services. After some very good reviews and an appearance on television by the author, requests for copies were received from all parts of the country. In six weeks the first impression of 5,000 copies had been sold or distributed; by the end of the year, two further impressions had been sold and early in 1968 the sales and distribution have amounted to nearly 20,000 copies.

The booklet is an account of the facts, the dangers and the problems associated with drug abuse and drug dependence, and is intended to be of value to social workers, teachers, youth leaders and all those concerned with the problem. Its particular appeal is that it is clearly written in terms that the lay person can understand. Undoubtedly, there was a great need for the information contained in the booklet as the demand for copies continues.

Topics

The practice of pursuing health education topics in clinics and comprehensive schools continued during the year. In January and February the subject chosen was "Winter well-being for the aged and the very young"; the following two months were devoted to Ro.S.P.A.'s Jubilee Year theme "Stop Accidents." During the summer months the topics included personal hygiene, food hygiene and family pets. A Clean Air Exhibition was held in Lewis's Stores in September and this was supported by a Bulletin article and suitable display material for the clinics. During October and November considerable attention was devoted to the presentation of burning accidents and for one week a "Fire and Safety" Exhibition was staged at

St. Agnes Church Hall, an account of which appears in the report of the Bristol Home Safety Council. With the introduction of the "breathalyser test" and the emphasis on the prevention of road accidents, all display material and the Bulletin article during December, was provided by the City Police Department.

Smoking and Health

Once again, attempts were made to interest schools and youth organisations in the subject of smoking and health; results were disappointing and details are given in the Report of the Principal School Medical Officer.

In November, an Assistant Medical Officer and the Assistant Health Education Officer arranged a pilot "crash course" for persons wishing to stop the habit of cigarette smoking. Clients were recruited by inserting a small advertisement in the personal column of the "Evening Post" on three consecutive evenings. Places on the course were allotted on a first-come, first-served basis; sessions were held from 7 p.m. to 8.30 p.m. each evening from Monday to Friday for one week. At each session a film or film-strip was shown and a short talk was given, but most of the time was taken up with group discussion and advice. Twenty-five persons applied to attend, but only fourteen attended on the first evening; eleven attended for four or five nights. By the end of the week, nine persons had stopped smoking. These are only short-term results, but early in 1968 an attempt will be made to follow up clients to assess the long-term results. The demand for such short courses is not satisfied and further courses are planned; however only a very small section of the cigarette smokers is being reached and the "smokers' clinic" is only one of the methods which can be used in our attempts to convince people of the health hazards associated with the smoking habit.

Health Education in Schools

Many teachers have continued to make use of the film and film-strip library and there have been a number of requests for talks or series of talks from secondary and comprehensive schools. Miss Mountford, the Deputy Health Education Officer, gives an account of the Section's activities in schools in the Report of the Principal School Medical Officer.

BRISTOL HOME SAFETY COUNCIL ANNUAL REPORT 1967

It may seem strange to start a report on the work of the Home Safety Council with a story of death and tragedy but by considering things in this way, one can appreciate more clearly what the Council is doing in continuing its programme of safety education of the public.

There were 63 fatal accidents which occurred in individual homes or in an institution during the year. The majority of the victims were elderly females (39), of whom 35 died as a result of a fall, six being residents in homes for the elderly. Over half (19) were aged between 80 and 90 years of age; two were in their mid-nineties and eight aged between 70 and 80 years. Only four elderly men died as the result of a fall; one aged 72 fell whilst cleaning the upstairs windows in his house. These figures confirm the national pattern of fatal home accidents, viz: that falls cause the greatest number of fatal home accidents and the main victims are very elderly women. This pattern has been maintained for very many years, and it is very

difficult to see what—in terms of education—one can do to prevent it. The old persons who have become firmly set in their ideas and way of life take little heed of advice on matters of safety.

In view of the advanced age of most of the victims of these accidents it is more than probable that the persons concerned had never received any instruction or advice on the prevention of accidents. Perhaps if some of these people had received some form of preparation for retirement and ageing, several of these accidents might not have happened; the occurrence of these tragedies strengthens the case for organised pre-retirement courses for husbands *and* wives; courses in which advice on the prevention of accidents should play a large part.

Ten persons—5 males and 5 females—died from poisoning; in all but one of the cases household gas was the causative agent. There were eight deaths caused by burns, six of the persons were between 71 and 85 years of age, the burns being caused by their clothing coming into contact with a fire; a one-year-old girl was playing with matches and her clothes caught fire and a three-year-old boy was the other victim.

Four deaths were caused in two house fires; in one tragic case two sisters, aged 10 and 6, died and in the other a brother and sister, 3 and 1, lost their lives due to asphyxiation.

The remaining fatal accidents occurred to a 61-year-old woman (fell on a metal flower stake) and a 6-year-old boy (inhalation of a foreign body).

It is against this background that Bristol Home Safety Council persists in its efforts to make all members of the public more aware of the dangers that exist in and around their homes.

Over the past few years, it has become increasingly evident that young people, in particular, are taking an increasing interest in safety in the home, and from the figures quoted above it is significant that only one child of school age suffered a fatal accident at home.

Talks

The members of the speakers' panel have continued their activities and addressed a wide variety of audiences; these have included school children, medical undergraduates and post graduates, old age pensioner associations, parent/teacher associations and many women's organisations. At one evening meeting organised by Messrs. John Laing Construction Ltd., an "Off-the-Job Safety Evening" was arranged for the managers and supervisors of that company, with their wives. The majority of the audience which numbered about 200 travelled from South Wales and the south of England. Mr. Dudderidge, Regional Organiser of Ro.S.P.A., for Wales, spoke about the activities of Ro.S.P.A. The Secretary of Bristol Home Safety Council spoke on Safety in the Home and Major Thomas, Regional Organiser for Ro.S.P.A. spoke on Road Safety.

Exhibitions

Once again an exhibition was arranged at the annual Bristol Flower Show and once again a gold medal was awarded by the show judges. The exhibition took the form of a display of household utensils which had been adapted or designed in such a way as to make them usable by aged or handicapped persons. Most of this equipment was provided by the Bristol Branch of the Red Cross Society whose members also very efficiently manned the stand for the three days of the show. The South-

Western Gas Board provided a stove and meter which had been adapted for use by handicapped people. We are indebted to the Red Cross and the Gas Board for their ready co-operation.

In October a "Fire and Safety" Exhibition was staged for one week. This was staged in the St. Agnes Church Hall in the St. Paul's area of the city. The exhibition was designed by Mr. Clifford Ashley and exhibition stands and material were supplied by the Oil Appliance Manufacturers' Association, FISAF works Bristol, Proban Ltd., The Fire Prevention Panel (Bristol), South Western Electricity Board, British Home Stores, Co-operative Retail Society Ltd., Aladdin Industries Ltd., and Bristol Health Department. The Lord Mayor of Bristol opened the exhibition which was later visited by about 1,000 school children from the area; many of the schools contributed material to the exhibition, provided by the children. Films were shown and there were regular demonstrations of mouth-to-mouth resuscitation by members of the Red Cross Society who were on duty for most of the week. We would like to record our thanks to all those who participated in the exhibition, to the Rev. Roy Blake, Vicar of St. Agnes, Mr. Mulk Raj, a peripatetic teacher for immigrant school-children, and to many other teachers from schools in the area. Adult attendance at the exhibition was disappointing but the response from the children was most encouraging and made the effort worthwhile.

The Home Safety Council member organisations would once again like to record their appreciation and thanks to the continuing support of the Health and Social Services Committee.

M. Farleigh, Chairman.

P. Mackintosh, Secretary.

THE MENTAL HEALTH SERVICES

H. Temple Phillips

(Chief Assistant Medical Officer of Health and Senior Medical Officer for Mental Health)

F. Morton

(Mental Health Officer)

and

K. R. Pennington

(Deputy Mental Health Officer)

SOCIAL WORK

In the Annual Report for 1966 reference was made to the difficulties in recruitment of social workers, and to the successfully operated scheme for the secondment of trained psychiatric nurses from the hospital service to the local health authority to act as relief mental welfare officers. During 1967 two of the seconded nurses applied for permanent posts and were appointed mental welfare officers. An officer who had been seconded for training to the Bristol College of Commerce was successful in obtaining a Certificate in Social Work, and returned to work for the local authority as a mental welfare officer. A vacant senior mental welfare officer post was filled by an experienced and qualified officer from another local health authority.

At the end of the year a full complement of senior mental welfare officers, mental welfare officers, and trainee social workers were in post, although one trainee social worker was absent from the section on secondment to a social work training course. For the first time, therefore, the districts were staffed by full teams of social workers, and it was possible to give more attention to long-term case-work. If the present satisfactory staffing situation continues, it will be possible to develop the section's prevention, care and after-care service quite considerably during the coming year.

The mental welfare officers' duties remain very varied, and it has been necessary to cope with considerable case loads of mentally ill, mentally subnormal and severely subnormal children and adults. Mental welfare officers have continued to attend many case conferences during the year, and have liaised closely with a variety of statutory and voluntary organisations. Attendance at out-patient clinics has been maintained, and a great deal of time has been devoted to social work in conjunction with training centres, workshops, clubs and hostels. A number of students, including some from the Bristol University Department of Social Studies and Administration, and from the psychiatric nurses' training schools have been attached to mental welfare officers throughout the year. In addition a 24-hour emergency service has operated, and a duty mental welfare officer has, at all times, been available to deal with urgent mental health problems in the city.

MENTAL ILLNESS

During the year 515 new cases of men and women suffering from mental illness were referred to the mental welfare officers. This shows an increase of 19 over the total for 1966. The sources of referral are set out in the mental illness section of Table "A" at the end of this report.

As a result of these referrals, 95 names were added to the community care list, bringing the total mental illness case load to 194 (Table "B"). Community care lists were reviewed constantly during the year.

110 cases were investigated but found not to require any form of further action by the mental health section.

Ten of the men and three of the women referred were admitted to Devon House.

In 1967 mental welfare officers were involved in the admission of 112 men and 198 women to psychiatric hospitals. It is interesting to note that this total of 310 is exactly the same as that for 1966 (123 men and 187 women), but in the year under review there was a small swing of 12 from compulsory care to informal care, a total of 89 people being admitted informally and 221 compulsorily this year as compared with 77 and 233 respectively last year.

SUBNORMALITY AND SEVERE SUBNORMALITY

Table "B" at the end of this report shows that at the 31st December, 1967, there were 797 subnormal and severely subnormal children and adults receiving care from the local health authority. Of these, 265 were children under the age of 16 years and 532 were over that age. There was, therefore, a drop of 57 in the number of cases on the register, despite the fact that 137 new cases were referred during the year. This reduction was due to the policy of constantly reviewing mental welfare officers' case loads and of removing cases from the list when appropriate to do so. Table "A" shows the breakdown of cases referred and the main sources of referral.

The 137 new cases were dealt with in the following manner:

	<i>M.</i>	<i>F.</i>	<i>Total</i>
Admitted to Hospital (informal)	4	2	6
Admitted to Hospital (detained)	3	4	7
Admitted to Marlborough House Hostel ...	11	—	11
Informal Community Care	49	43	92
Pending	5	3	8
No action required	8	4	12
Died before action could be taken ...	1	—	1
	<hr/> 81	<hr/> 56	<hr/> 137

Waiting List

At the commencement of 1967 there were 29 names on the waiting list for admission to hospitals for the subnormal and severely subnormal, and during the course of the year 30 were added. Of this total of 59, 11 were admitted to hospital, five were deleted (care no longer being required), one was admitted to a geriatric hospital, three died and one moved to Somerset. This left a total of 38 awaiting admission at the 31st December, 1967.

11 cases out of the total of 38 on the waiting list are in urgent need of hospital admission. 8 are 12 years of age and under and the remaining three are aged 26, 19 and 17 respectively. The 19 and 17-year-olds are multi-handicapped (see Table "C").

In addition to the 11 cases admitted from the waiting list it was necessary to admit a further 37 as a matter of urgency, making a total of 48 admissions during 1967.

These admissions were arranged in accordance with the following provisions of the Mental Health Act, 1959:

			<i>M.</i>	<i>F.</i>	<i>Total</i>
Section 5 (Informal)	...	...	18	12	30
Section 25	...	...	—	2	2
Section 26 (Treatment)	...	...	1	2	3
Section 60 (Court Order)	...	...	2	—	2
			21	16	37

Day Hospital Provision for the Mentally Subnormal

In the 1966 Annual Report reference was made to the recommendation of the Minister of Health that subnormality hospitals should make day hospital provision for children and adults with disturbed behaviour or gross subnormality associated with physical handicap who need specialist treatment or constant nursing care.

Although the Regional Hospital Board has not created special units for this purpose the hospitals have provided a limited number of day hospital places in existing accommodation.

At the end of 1967, however, only 9 Bristol patients were afforded this facility, 5 men in the Hortham/Brentry Group, and 1 man and 3 boys in the Stoke Park Group. Several others could have attended if transport and escorts had been available, but unfortunately the Bristol Ambulance Service was heavily committed and unable to undertake additional work. Methods of solving this problem are already being explored, and it is hoped that a solution will be reported next year.

OUT-PATIENT CLINICS

As stated in a previous paragraph of this report, mental welfare officers have continued to work in out-patient clinics and have liaised closely with the psychiatrists and general practitioners.

The following report from Dr. D. F. Early deals with the clinic service provided for the mentally ill, while the comments written by Dr. J. Jancar and Dr. J. B. Gordon Russell relate to Assessment Clinics for the mentally subnormal.

“During the year, a close liaison has continued between the mental welfare officers and the hospital medical staff.

“Mental welfare officers continue to attend the out-patient departments of the general hospitals with consultant psychiatrists. In consultation with general practitioners they now do social reports before the patient is seen in out-patients. This, together with the general practitioner’s referring letter, ensures that a very considerable amount of information is available to the consultant in out-patients.

“Mental welfare officers attend the weekly assessment conference at Glenside Hospital, where admissions, discharges and other current hospital and community problems are discussed.

“I visit the Mental Health Section each week at 12 Lower Castle Street for discussion of outstanding problems of a clinical or of an administrative nature. I also attend the regular Devon House conferences for discussion on the residents in that hostel.”

(D. F. Early, Consultant Psychiatrist)

Dr. J. Jancar, Consultant Psychiatrist, Stoke Park Hospital, reports:

“The following is a short report on the Assessment Clinics at the Central Health Clinic and Bush Training Centre.



Snowdon Road Workshops

"I saw a total of 43 new cases and 113 follow-ups. The patients came from the following local health authorities.

		<i>New</i>	<i>Follow-up</i>
Bristol L.H.A.	... ..	26	89
Gloucestershire L.H.A.	... ..	8	16
Somerset L.H.A.	... ..	2	1
Wiltshire L.H.A.	... ..	7	7

"I cannot add very much to my previous observations on the Assessment Clinics which are an established part of the Bristol Mental Health Services and form a very important liaison between the local health authority and the hospital services, especially since we liaised the Assessment Clinics with the Assessment Units throughout the Stoke Park Hospital Group.

"An appreciation of the benefit given to nurses of the Stoke Park Hospital Group who have attended the Clinics, was given a public acknowledgement at the nurses' annual prize-giving in October last."

Dr. Gordon-Russell reports that the Assessment Clinic has continued successfully throughout 1967 and interviews have been conducted on a number of difficult problems in relation to subnormality. The clinic continues to be a valuable liaison service between officers of the local health authority and officers of the hospital service. A total of 57 cases, 27 new cases and 30 follow-up, were seen during the year.

Snowdon Road Workshop

Previous reports have dealt with the "Marlborough House" workshop and with the contract entered into with the Regional Hospital Board to supply a variety of dressing packs for the use in the hospitals.

In 1967 increasing difficulty was experienced because of lack of workshop and storage space, and when the Ambulance Section of the Health Department vacated their sub-station in Snowdon Road, Fishponds, our workshop was moved to that building from Marlborough House on the 20th November, 1967. The new accommodation is much more suitable, particularly as it is easily accessible to motor vehicles which can be driven right up to the door. No structural alterations have been necessary. There are now 50 places instead of the 24 provided on the Marlborough House site and a further advantage is that there is, on this site, ample room for development.

At the end of 1967 there were 12 men and 14 women attending the workshop, a total of 26 out of a possible 50. It is not expected that any difficulty will be experienced in filling the workshop; indeed the problem will be to limit the numbers attending. Workers are drawn from the Bush Training Centre, from the Special Schools, and also from men and women who are experiencing difficulty in finding employment after leaving Special Schools. All those who attend are kept under constant review and the mental welfare officer, together with the officers of the Ministry of Labour, persist in efforts to place suitable men and women in employment.

The contract for assembly of dressing packs for use in the hospitals has been continued throughout the year. Small supporting contracts with Bristol manufacturers have been entered into in order to ensure a constant pressure of work and to provide some variety in the tasks performed.

No transport is available to workers, who all travel unescorted, but their fares are refunded each week. A free mid-day meal is provided, and, in addition, an incentive pocket money allowance is made. Any profits are paid into an amenities fund from which all the workers benefit.

All the men and women attending the workshop are in receipt of Social Security benefits and until recently an earnings limit of 30s. per week was imposed. This has now been raised to £2 per week, and a ruling on how this will affect our payments in the workshop has been requested from the Ministry of Social Security. To date our maximum payment has been 15s. per week per person, but it is anticipated that as the workshop develops in the new premises additional incentive payments will be made.

BUSH TRAINING CENTRE

During the year January to December, 1967, the resources of the Bush Training Centre have been strained to capacity in an effort to accommodate children and adults requiring special education and training.

Junior Training Centre

Number on Register: December 1966, 123; December 1967, 132.

In the junior training centre, the pressure of applications was felt most acutely in the lower age range, and was due mainly to an increasing number of requests on behalf of children under the age of five years. This problem of congestion was partly solved by a change in organisation of classes. Previously it has been customary to segregate children of much lower ability, as well as those with serious behaviour problems, from the more capable girls and boys of the same age, and this led to the practice of creating two classes of parallel age range.

By discontinuing this arrangement, it has been possible to find, to some extent, a practical solution to the problem of pressure of numbers, and the junior training centre has been brought, in this respect, into line with current educational methods. It is satisfactory to report that, at any rate for the present, the necessity for a waiting list has been avoided, and we have not had to refuse admission to any children over the age of five years.

We are pleased to record that one of our former training centre students, having successfully completed the two-year training course for teachers of mentally handicapped children, has been appointed to the post of Assistant Supervisor and is now in charge of one of our nursery groups. Of the more recent generation of training centre students, one was seconded for this training course, and two were awarded educational grants, one for the Manchester and one for the Bristol course.

Three more students began their year's practical experience in the autumn of 1967, and all three have been offered places on the 1968 N.A.M.H. Training Course in Bristol.

Clinics

Unfortunately no arrangements could be made for annual medical inspections during 1967. Dental inspections were carried out on one day to all children in attendance; 135 children were examined and appropriate treatment was arranged where necessary.

Assessment Clinics continue to be held at the Training Centre, at intervals of approximately three months, and parents have the invaluable opportunity of con-

sulting the psychiatrist on familiar ground, while the child may be seen in a normal environment.

Hearing Assessment Clinics were frequently arranged for the first part of the year but unfortunately fell off in the last quarter. We hope that they will be resumed in the near future.

Educational Visits

Small parties of children have been taken by their teachers on a number of educational visits, including the city docks, a chocolate factory, the fire station, the police station, a fire safety exhibition, the airport and the Westbury Wild Life Park. Such visits are valuable both from the point of view of interest and as practical social training.

Social Events

There have been the regular events such as harvest festival, nativity play, and carol service.

Christmas parties were held as usual at the Training Centre and were visited this year by the Lord Mayor. Each child was given a small present selected by his or her teacher to be individually suitable and to ensure a personal note.

Special Care Unit

Number on Register: December 1966, 26; December 1967, 30 including three part-time.

The Special Care Unit has continued to play throughout the year a valuable, though somewhat changed role. In December, 1967, there were 30 names on the register, which represents the full extent of the accommodation available, and a slight increase on the previous year. What does not emerge from these figures is that the group of multi-handicapped requiring special care methods indefinitely and the grossly mentally subnormal children are now largely cared for at the Stratton Street Day Centre. This leaves the special care unit at the Bush Centre free to accept increased numbers in the two remaining groups—first the hyperactive and mal-adjusted, and second, the very immature child. Such children, it is reasonable to hope, may be capable of progress with time and special care techniques.

In view of the fact that there are more applicants than places, a part-time system is arranged where possible, for very immature children. These are ones who need a more gradual and partial separation from their mothers, and the system has a practical value too, as two children can be taken instead of one, if each attends on a half-time basis. A further advantage for these children is the introduction of two mini-coaches, fitted with specially designed harnesses. These small coaches also have the obvious advantage of performing shorter daily journeys.

Adult Training Centre

Although this year shows a decrease of six names on the register (from 195 to 189), the problem of accommodation in the adult training centre continues to be a serious one as the numbers of trainees attending still stands at 30 in excess of places provided. The solution is difficult because of the steady intake of trainees and a very small outward movement. The incoming population is derived from girls and boys leaving the junior training centre, from E.S.N. school leavers, and from some individuals who fail to hold normal employment in the community. Thus there is a continuous though unpredictable increase, which this year was partly relieved by the transfer of six trainees to the new workshops recently opened in Snowdon Road.

Of the 189 on the register at the end of December 1967, 97 were men and 92 women.

Nine boys and girls have joined the workshops from the junior training centre, having completed their transition year at the age of 17. The policy of having a transitional year continues to be successful, and there is a close liaison between teachers and instructors in the adult training centre.

The industrial projects in the workshops have gone ahead satisfactorily and at no time during the year has there been a shortage of work. A number of new contracts have been secured from local firms and several of these are specially pleasing for the workers, involving the assembly of attractive materials, such as gay coloured paper and bright plastic pen parts.

An encouraging feature of the general training programme for adults is the expansion and development of voluntary evening classes. The scheme when initiated in May 1966 consisted of classes in two subjects only—Homecraft and Social Education—and the numbers attending were 12 in each group. By the autumn of 1967, plans were being made to start an additional series of classes in carpentry, mainly for the young men, and the demand is such that it is hoped to extend the syllabus and include dress-making in the not too distant future. Every class has so far been well supported and has maintained the required level of attendances.

Physical Education

The programme of physical education has been developed during 1967 and includes the following routine activities:

Swimming: The Swimming Pool is regularly and almost continuously used by groups from the special care unit, junior training centre, and adult training centre.

As a result of combined effort and coaching, four boys and two girls of the junior training centre and six women and five men from the adult training centre have been successful in gaining their one length swimming awards. Great credit for this success is due also to the excellent voluntary help which is given by the members of the Bristol Mothers' Swimming Club. A rota of expert instructors attend with admirable regularity and give help to trainees of all ages, and also to members of the staff who are interested in swimming and life-saving diplomas.

On 13th September an "At Home" was held in the swimming pool for the junior training centre, and on 21st September the adult training centre held their first swimming gala. Both events were successful and well supported by visiting parents and friends.

Annual Sports Days were held on 13th July for the adult training centre and on 20th July for the junior training centre. These are both occasions which give scope for practical training in team work, which is needed in several of the events, notably relay races. These and similar meetings are also regarded as opportunities to practice social skills, the importance of which is stressed in the construction of training centre programmes.

At present the adult training centre provides teams for netball, football and cricket, and matches are arranged with other training centres, hospitals and schools. Tennis as a training centre sport is in the early stages, but it is hoped to introduce this gradually as an activity for seniors and adult trainees in the future.

Psychology

Work during the past year has continued along the lines already described in previous reports. This has consisted of activity in the several spheres of training centre

routine in which psychology can usefully be employed. Of these, there is the advisory function in which frequent consultations have taken place with head teacher or workshop manager over general or individual problems; with teaching staff and assistant instructors in the case of difficulties arising with individual pupils or trainees, and finally with parents, in instances where they have asked for an appointment for psychological advice.

In addition to these sessions, there have been the usual number of routine assessments throughout the training centre population, as the test for an intelligence quotient provides useful information in respect of individual progress or deterioration. This predominantly psychometric part of the work has been carried on chiefly by the use of three tests, one appropriate for the nursery stage which reaches to a mental age of two years; a continuation one mainly for the school children, and another more suitable for adult trainees. This latter gives results which throw light on the individual level of practical ability which is useful in vocational guidance, as manual skill is one of three important factors to be considered when estimating personal readiness for outside employment.

Five morning sessions have regularly been employed in the above work, with one, two, or even three additional afternoon sessions as the need has arisen.

Speech Therapy

This specialist service has continued throughout the year as a valuable part of the training centre curriculum with two speech therapists giving four sessions per week. Contemporary trends suggest that training in the skill of verbal communication is developed more readily in an informal background than in a teacher/student situation. Throughout the year the two speech therapists who attend for one whole day each week, have followed this principle and held weekly informal conversation groups with selected adult trainees. In the junior training centre they have tended to work with small classroom groups, co-operating with the teacher; in some cases, however, individuals may still be seen separately for remedial sessions in the speech therapist's room. Realising the importance of the home and family influence in the learning situation, special meetings for groups of parents have been arranged by the speech therapists with the purpose of securing their understanding and co-operation with the aims and methods of speech development. These meetings have been well attended and proved to be exceptionally useful and lively.

Parents' Weekly Meetings

Knowing the fundamental importance of the home background in the development of both junior and adult trainees, and the great contribution which may be made by parents and members of the family, informal afternoon meetings of small groups of parents have taken place during most weeks of the year. The intention is to allow parents to air their difficulties in front of sympathetic listeners and to discuss with other parents or staff, practical methods of solving minor problems. These meetings have proved to be helpful and illuminating to both parents and staff, particularly in the case of the junior training centre and special care unit groups.

M.W.O. Case Conference

Lines of communication between home and training centre are strengthened, increased, and completed, for the benefit of the trainees and their families, by the essential activities of the mental welfare officers.

For this reason, weekly case conferences are attended by senior members of the training centre staff and the mental welfare officer concerned with the individual

subject, in order to pool knowledge of the various aspects of problems emerging at home, at work or at play. This degree of liaison is invaluable in dealing with difficulties which can only be surmounted by considering the situation as a whole.

Visitors and Hospitality

The Bush Training Centre continued during 1967 to show hospitality to a large number of visitors from all over the country and from overseas, the number during the current year being 1,429. This is, of course, in addition to the regular long-term visitors such as the Younghusband course students, the American Winant Volunteers, and the N.A.M.H. course students.

The kitchen staff, under the kitchen superintendent, have maintained a consistently high standard throughout the year, and have served 87,750 meals.

STRATTON STREET DAY CENTRE

This centre continues to cater for severely mentally subnormal children and young adults who are also physically handicapped. At the end of the year there were 24 on the register, four over the age of 16.

Shortage of space in the premises has handicapped the work of the staff, and particular difficulty has been experienced as a result of the inadequacy of the w.c. and washing facilities. Careful consideration has been given to alterations in the structure, but as yet no satisfactory method of changing the layout has been found.

All the children attending have been transported in specially adapted mini-coaches owned by the local authority, and the programme followed has been one of daily care by the staff, together with treatment by the physiotherapist who attends on a regular sessional basis. Weekly visits to the Bush Training Centre swimming pool accompanied by the physiotherapist have been continued as in previous years.

A number of students from the College of Commerce and from the Police Training School have had practical placements in the Centre during the year, and many visitors from other parts of the country and from overseas have been received.

HOSTELS

Residential Short-Stay Unit, Hengrove

The number of applications for places in this unit, although still rather disappointing, shows a steady yearly increase. During the current year, there have been 137 admissions for varying periods of short-term care, the figure for the previous year being 118. A number of children have been admitted more than once during the year, and the number of *families* which made use of the service during 1967 was 75.

Marlborough House

The staff situation was relieved during the year by the appointment of a non-resident assistant warden whose duties were mainly associated with Marlborough House but included relief work at Devon House during periods of sickness or leave.

A change-over from solid fuel to gas central heating also helped to reduce the work of the resident staff. Some of the problems mentioned in the 1966 report were, therefore, minimised.

At the commencement of the year there were 15 men in residence. At the close of the year the number had risen to 20, but for one period in August there were 21 of the 24 beds occupied. The average number of places occupied per day in 1967 was 17·20 (71·66 per cent) as compared with 14·14 (58·91 per cent) in 1966.

The hostel continued to cater for men of subnormal intelligence, many of whom had spent 20–30 years continuously in hospital before coming out into the community.

The combined efforts of the hostel staff and the mental welfare officers were rewarded by the progress shown by almost all the hostel residents, who maintained a good work record and achieved improved social adjustment.

There was a satisfactory turnover of residents during the year, 15 having been admitted and nine discharged.

Of the 15 new entrants, seven came from mental subnormality hospitals, three from unsatisfactory lodgings, one from an approved school, one from the Salvation Army hostel, and three from the homes of relatives who were unable to cope. One of the 15 was received for short-term care only following the death of his father.

Of the nine who were discharged, one left after two weeks' temporary care, three were admitted to mental subnormality hospitals, four went into lodgings, and one left without giving notice and moved away from Bristol.

In addition, one man entered hospital for a two-week period in order that a full assessment upon his deteriorating physical condition could be made.

Devon House

The year commenced with six men and three women in residence. During the period under review 10 men and three women were admitted and nine men and three women left. At the close of the year, therefore, seven men and three women remained in residence, a total of 10 persons.

The policy of using the hostel for rehabilitation purposes was maintained, the committee having adhered to the view that it was more important to help selected people to return to a normal community life than to provide permanent hostel care. In continuing this policy it was appreciated that any degree of under-occupancy would inevitably increase the cost per place in the hostel.

Of the 12 persons discharged from the hostel during the year, one went back to a psychiatric hospital for further treatment, and one went to a general hospital in which she died. The remaining ten can be recorded as "successes," four having returned to their own homes, five having gone into lodgings and one having moved to live in a newly acquired flat. Of the 12 discharged, eight had been in Devon House for less than six months, one for less than 12 months, two for two years and one for just under three years.

All the residents received social support from the mental welfare officers, who co-operate with the hostel staff in the rehabilitation programme. Mental welfare officers, administrative staff, a consultant psychiatrist and a general practitioner attended hostel case conferences throughout the year.

An innovation during the year was the introduction of "Service 9" volunteers who visited Devon House regularly on two evenings per week, and whose companionship was much enjoyed by both male and female residents.

Petherton

Throughout the year work proceeded on the purpose-built hostel for 35 elderly mental infirm persons at the junction of Wells Road and Petherton Road, Hengrove.

The rate of progress suggests that it will be possible to occupy this building early in 1968.

CLUBS

Somerset House Social Therapy Club

This club has flourished during the year. The average daily attendance remains at 22 persons per session as last year and there are 42 on the register, all of whom attend for some part of the week.

A varied programme of activities has been conducted, including discussion groups, film shows, outings, games, and various group activities.

A great deal of thought has been given to the possibility of reducing the amount of occupational therapy in the club, but this has not been possible because of the tremendous interest shown in that aspect of club life by the majority of the members. Indeed it has been noticeable that when games afternoons have been scheduled the attendance has dropped.

In order to make room for new members, and also to provide a progressive step in the rehabilitation programme, it was hoped to transfer some of the most able members to the King Street Club. It has, however, not been possible to achieve this to any effective degree, owing to understandable reluctance on the part of the members concerned.

The club staff has remained unchanged throughout the year.

Steeven's House Club

The Steeven's House Club for elderly mentally disordered persons has continued to meet each week-day afternoon in the common-room of Steeven's House Almshouse, Old Market Street. This accommodation is made available to the local health authority by the Almshouse Trustees free of charge, but the local authority contributes an annual amount towards running costs.

The number of names on the register has dropped during the year from 27 to 25, but the average daily attendance has increased from 16 to 18, a number well suited to the size of the accommodation available.

A considerable amount of interest is centred around simple handicrafts. A number of men enjoy rug-making and canework, while the women prefer to knit, sew and embroider.

The club has been privileged to receive a number of visits during the year, including one from the Downend Baptist Ladies' Choir, and one from the Townswomen's Guild. In the summer 21 club members enjoyed an outing to Symonds Yat. In the winter months a carol service, a musical afternoon, and a Christmas party were held. Simple card and other games are played most afternoons.

It has again been demonstrated that the club members derive considerable benefit from attendance at the club, and from their association with other elderly people, including the residents of the Almshouse, who show an interest in the club and attend many of its sessions. There is no doubt that relatives also benefit very considerably by being afforded some respite from the continual care and supervision needed at home.

King Street Club

This club was designed to provide social therapy for people on the fringe of mental illness, and the intention was to provide facilities at a higher level than those at Somerset House Club.

When the King Street Club was established it was hoped that many of the members of the Somerset House Club would progress to King Street, and thence to normal social clubs in the community. Unfortunately this progression has not materialised. People have been loath to leave the environment of the Somerset House Club, with which they had become familiar, and to face up to a new situation. It might well be, also, that the attraction of the occupational therapy provided at Somerset House has been a contributing factor in the members' desire to continue to attend that club.

At the close of the year there were 12 members on the register of the afternoon club, but the average attendance was disappointingly low, often not more than six attending. The evening club was rather more popular and there was, at those sessions, an average attendance of 10 out of a possible 20 members. The mental welfare officers made great efforts to encourage new club membership without much success.

During the year the situation was reviewed, and, as it appeared that the evening club was more popular than the afternoon club, it was decided to cancel one afternoon session and replace it with an evening session. Thus at the end of the year during each week three afternoon sessions and two evening sessions were held.

Although attendances have not been high there is no doubt that the club has served a very valuable rehabilitative purpose. There has been reasonable turn-over of people who have obviously been helped quite considerably by the club organiser in the club setting.

Townsend Youth Club

Another extremely successful year is reported by the management committee of this club.

Under the guidance of the two part-time club leaders, the membership of just over 100 young men and women of subnormal intelligence have attended all sessions regularly, and have joined in all activities with enthusiasm.

A "work" programme of painting, carpentry, sewing, knitting and other group activities has been pursued industriously. Club Week resulted in a collection of £119 by club members, and of this amount £24 was sent to the National and Local Association of Youth Clubs, the balance of £95 being added to the club fund.

Throughout the year various sporting activities, including cricket matches and swimming competitions, have been enjoyed, and an invitation from the Bristol Association of Youth Clubs to take part in a skittles knock-out competition was accepted, this being followed by darts and skittles matches with other Bristol youth clubs.

Entertainment was provided through the medium of outings, parties, a firework display, and visits to a pantomime and to a circus.

A great deal of support has been provided by parents who have served as regular voluntary helpers in the club.

It is unfortunate that there is still a waiting list of prospective members, a problem which cannot be solved without the provision of additional accommodation and transport.

TABLE B

NUMBER OF PERSONS UNDER LOCAL AUTHORITY CARE AT 31st DECEMBER, 1967

	Mentally ill				Elderly mentally infirm				Psychopathic				Subnormal				Severely subnormal				TOTAL
	Under age 16 16 and over								Under age 16 16 and over				Under age 16 16 and over				Under age 16 16 and over				
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
1. Total Number ...	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)		
1. Total Number ...	—	—	84	110	—	1	—	—	—	—	21	15	73	120	108	121	223	116	992		
2. Attending workshops/ occupation training centres ...	—	—	—	—	—	—	—	—	—	—	17	11	22	37	78	67	92	75	399		
3. Awaiting entry to workshops/occupation training centre ...	—	—	—	—	—	—	—	—	—	—	1	—	—	—	8	8	—	1	18		
4. Receiving home training	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
5. Awaiting home training	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6. Resident in L.A. home/hostel ...	—	—	4	3	—	—	—	—	—	—	—	—	9	—	—	—	1	—	17		
7. Awaiting Residence L.A. home/hostel ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8. Resident at L.A. expense in other homes/hostels ...	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	2		
9. Resident at L.A. expense by boarding out in private ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
10. Attending day hospitals ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	6	—	9		
Receiving home visits and not included in lines 2-10	—	—	—	—	—	—	—	—	—	—	2	1	18	12	4	4	25	24	90		
(b) others	79	107	—	—	—	—	—	—	—	—	1	3	24	71	15	42	99	16	457		

TABLE C

NUMBER OF PATIENTS AWAITING ENTRY TO HOSPITAL, ADMITTED FOR TEMPORARY RESIDENTIAL CARE
OR ADMITTED TO GUARDIANSHIP DURING 1967

	Mentally ill			Elderly mentally infirm			Psychopathic			Subnormal			Severely subnormal			TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	Under age 16			16 and over			Under age 16			16 and over			Under age 16				16 and over																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	M	F	(2)	M	F	(3)	M	F	(4)	M	F	(5)	M	F	(6)		M	F	(7)	M	F	(8)	M	F	(9)	M	F	(10)	M	F	(11)	M	F	(12)	M	F	(13)	M	F	(14)	M	F	(15)	M	F	(16)	M	F	(17)	M	F	(18)	(19)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
1. Number of persons in L.H.A. area on waiting list for admission to hospital at end of year																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
(a) in urgent need of hospital care ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—</

AMBULANCE SERVICE

R. F. F. Wood

(Chief Ambulance Officer)

This was the first year of operation as an ambulance service in a central station housing all staff and vehicles. Many problems relating to both operational and administrative details arose but these were dealt with in consultation with everyone concerned with the various problems and by the end of the year the service was running as smoothly and efficiently as was possible in the circumstances. These were in the main related to the fact that during the year a total of 181,950 patients were conveyed to and from hospital involving a journey total of 856,400 miles. This was an overall increase of 4,203 patients and 21,581 miles. Excluding the supplementary services of the Taxi Association and Hospital Car Service there was an increase of 4,576 patients carried in ambulance service vehicles. Bearing in mind that the 1966 figures showed an increase over the previous year's total it was obvious that a close watch had to be kept on all operational procedures to ensure that patients were picked up promptly in an emergency and out-patients brought to hospital in time for appointments with consultants and medical staff in the various hospital departments. This placed considerable strain on all the control staff and every endeavour was made to lighten their burden as far as was practical. They were faced in the early part of the year with a rail crash at one of the smaller stations in the City and acquitted themselves well in that ambulances were on the spot within a few minutes from the time of receipt of the call for assistance. Fortunately there was more material damaged than injury to persons and it was only necessary to convey a total of eight people to hospital.

One of the driving staff, Driver Mills, was awarded the Queen's Commendation for risking his life in rescuing a man from the bottom of a fermentation vat in one of the breweries in the City. The award was presented to him in London by the Minister of Labour, Ray Gunter.

The Regional Ambulance Competition of the National Association of Ambulance Officers was held in Bristol this year and was staged in and around the central ambulance station.

At the later end of the year, as a result of the abolition of the Ambulance and First Aid Section of the Civil Defence Corps and in accordance with the Ministry of Health Circular 13/67, the Health Committee decided to implement the Minister's proposals to form an ambulance reserve, for training members of the full-time service in their war-time duties, to prepare plans for the operation of the ambulance service in time of war and to designate the Chief Ambulance Officer as the Officer responsible for the Ambulance Service in time of war and the training and other duties required in peace time under the general direction of the Medical Officer of Health.

Throughout the year our friends in British Railways, the Taxi Association and Hospital Car Service offered great help and accepted and dealt with cases passed to them with promptness and efficiency, on many occasions at very short notice.

The arrangements with the Avonmouth Docks Ambulance Committee worked well throughout the year and conveyed 66 patients to hospital on behalf of the Bristol Ambulance Service.

The mechanical state of the vehicles in the ambulance fleet was catered for by two mechanics seconded to the service by the Corporation Transport and Cleansing Officer. These two men employed in the mechanical maintenance bay of the new station worked hard and effectively to raise the standard of mechanical efficiency of all vehicles in the fleet and as a result breakdowns, etc., were kept to a very low level and ambulance crews were happier to have a personal relationship with the men whose sole task was to maintain ambulance service vehicles. Small jobs and adjustments were made on the spot, thereby avoiding delay and the previous special journey to the main Corporation depot at Albert Road.

There are many problems still to be resolved. With co-operation and understanding on all sides they will be and the result will be an ambulance service whose standard of service and efficiency will be hard to beat throughout the country.

GENERAL STATISTICS 1967

Month	Bristol Ambulance Service					Supplementary Services		Grand Total	Rail	
	Accidents	Maternity	I/D	General	Total	Taxis	H.C.S.			
January	...	660	171	25	14,403	15,259	127	396	15,782	10
February	...	600	154	21	13,195	13,970	120	352	14,442	5
March	...	727	180	15	12,931	13,853	136	326	14,315	6
April	...	584	172	24	13,115	13,895	118	320	14,333	2
May	...	715	183	28	14,267	15,193	221	337	15,751	3
June	...	744	154	28	13,978	14,905	166	363	15,433	2
July	...	747	146	27	13,727	14,647	149	363	15,159	2
August	...	726	153	24	14,025	14,928	92	296	15,316	4
September	...	729	146	24	13,547	14,446	136	346	14,928	1
October	...	702	150	24	14,624	15,500	178	399	16,077	3
November	...	682	148	30	15,044	15,904	233	451	16,588	6
December	...	756	182	26	12,313	13,277	176	373	13,826	8
Totals	...	8,372	1,939	296	165,169	175,776	1,852	4,322	181,950	52

The total of 181,950 patients, shows an increase of 4,203 over the previous year. Conveying these patients to and from hospital involved a total of 856,400 miles, an increase of 21,581 miles over 1966.

EMERGENCY AMBULANCE SERVICE

MATERNITY CASES

As shown in last year's Annual Report, more requests for the conveyance of maternity cases in labour came directly from relatives than from the 999 calls. Such direct requests are not included in the main tabulations, but the following is a brief summary of maternity journeys:

Group A	1967	1966	1965
No. via 999 calls and included in tabulations ...	352	325	416
Group B			
Requests directly telephoned	1,613	1,733	1,873
	1,965	2,058	2,289

It will be seen that there was a slight reduction in the requests for ambulances for maternity cases, but there was also a reduced number of hospital confinements. Whereas in 1965 approximately 40 per cent of hospital maternity cases were conveyed by the ambulance service, figures for the past two years have been of the

order of 35 per cent. As in past years a high proportion of journeys for maternity cases are undertaken between midnight and 7 a.m. as compared with emergency journeys in general.

GENERAL EMERGENCY CALLS

The figures given in the following sections relate to emergency calls only and are strictly comparable with the figures shown in previous annual reports. They exclude the 1,613 calls made in response to relatives' direct requests for conveyance of maternity cases. Also excluded are calls from the Emergency Bed Bureau, some of which are often of an urgent character. They do, however, represent the bulk of the urgent cases for which no prior warning is given.

TIME CALLS RECEIVED

Here again there was little variation from previous years, such small increases that did arise will be seen in the average number of patients carried between 10 p.m. and 7 a.m. which averaged 29.4 per week as compared with 26.5 in 1966. The distribution of cases throughout the week varied little, with Friday still being the day on which most calls were received. Such minor increases as did arise tended to be at the weekend (see Table 1).

LOCATION OF VEHICLES

It will be seen that approximately 90 cases per week were serviced from the Central Ambulance Station, whilst the cases dealt with by ambulances from resting points or on the road decreased only very slightly. As might be expected, the bulk of the cases between 10 p.m. and 7 a.m. were dealt with from the new central station. It will not be until 1968 that the full effect of the Central Ambulance Station will be reflected in the figures as the Fishponds station was operating for more than half the year. (See Table 2.)

LOCATION OF PATIENTS

The wards of the city have been grouped into six areas, as will be seen from the sketch map (Fig. A). Despite new buildings and traffic alterations, the location of patients remained remarkably constant over the past three years. (See Table 4.)

TIME TO SCENE

It will be seen from Table 3 that seven out of ten cases were reached in less than ten minutes from receipt of the request, and in nine out of ten cases the ambulance arrived on the site of the emergency in less than a quarter of an hour. In only two cases out of every 100 did twenty minutes elapse before the ambulance arrived to deal with the emergency. Compared with previous years there is very little change in spite of the heavier traffic. The fact that the Central Ambulance Station is now servicing the south side of the city has not materially affected the speed with which ambulances reach emergencies in an area where many cases were previously dealt with by the Hemplow station.

TIME TO DESTINATION

It will be seen from Table 4 that over the past three years there has been a tendency for these journeys to take somewhat longer. Approximately two-thirds of the emer-

gencies reach their destination (usually hospital) within forty minutes of the ambulance being summoned. The variation is more marked in relation to the location of the incident than by the point at which the ambulance is located when the call is made. It will be seen that within forty minutes of the receipt of the call 80 per cent of the cases in the north central area are in hospital compared with only one-third of the cases in the south-eastern area and 40 per cent in the south-west. The lack of a hospital on the south side of the city is clearly the main reason for this delay. At the Fishponds station, which was closed during the year, they dealt predominantly with the north-eastern area, and usually showed better than average times for conveying patients to hospital. In the past three years it has always conveyed a higher percentage of patients to hospital within forty minutes than all the other stations, and it will be interesting to see whether its closure materially affects the figures in 1968.

Another factor which arose during the year was the attempt to divert a proportion of cases from the Bristol Royal Infirmary to Southmead Hospital and this could affect the length of journey and consequently the time involved. This point is dealt with in a later paragraph.

CAUSES OF INCIDENTS

It is surprising how the types of emergencies serviced by the ambulance service have remained remarkably constant; the figures for the past three years are shown below:

				1967	1966	1965
Falls	...	...	...	1,976	2,044	2,082
Burns	...	...	...	130	122	135
Poison	...	...	...	443	398	402
Sudden illness	...	...	...	1,900	1,794	1,522
Motor vehicle accidents	...	...	...	1,826	1,897	1,873
Other transport accidents	...	...	...	87	97	104
Maternity cases (via 999 calls)	...	...	...	352	325	416
Assault	...	...	...	216	208	250
Other	...	...	...	1,046	926	946

Other transport accidents include injuries associated with bicycles, shipping, etc., while the miscellaneous "Other" includes unspecified injuries both at work and on the sports field, as well as attempted suicides.

DESTINATION OF PATIENTS

As mentioned previously, an attempt was made during the year to divert more cases to Southmead Hospital, and this in fact was achieved although the numbers dealt with by the Bristol Royal Infirmary remained unchanged.

The closure of the emergency service at Cossham Hospital in May is reflected in the smaller numbers dealt with by that hospital. There was a corresponding increase at Frenchay Hospital to which this service was transferred, although the combined number of cases dealt with at the two hospitals was slightly less than in the previous year.

Discussions have taken place on the possibility of conveying more accident cases to Frenchay Hospital with a view to relieving the Bristol Royal Infirmary. Areas closer to the centre of the city will be involved and it is likely that any major change could result in an increase in the length of time taken to convey patients from the scene of the accident to the hospital.

		1967	1966	1965
Bristol Royal Infirmary	...	5,361	5,364	5,226
Southmead	...	1,469	1,103	1,205
Cossham	...	210	633	687
Frenchay	...	379	22	14
Mortimer House	...	72	76	80
Bristol General	...	112	106	90
Bristol Maternity Hospital	...	33	42	39
Other hospitals	...	100	101	117

The figures quoted above exclude patients who were taken directly to their homes and those who were found to be dead when the ambulance arrived and were taken direct to the mortuary.



FIG. A

TABLE 1
EMERGENCY AMBULANCE JOURNEYS

Day of Week	HOUR OF CALL BY DAY OF WEEK										1965 Weekly average		
	Midnight—7 a.m.		7 a.m.—2 p.m.		2 p.m.—10 p.m.		10 p.m.—Midnight		1966				
	No. of cases	Weekly average	No. of cases	Weekly average	No. of cases	Weekly average	No. of cases	Weekly average	No. of cases	Weekly average			
Sunday	183	3.5	245	4.7	329	6.3	89	1.7	846	16.3	15.0
Monday	94	1.8	452	8.7	531	10.2	94	1.8	1,171	22.5	22.6
Tuesday	85	...	434	8.3	527	10.1	76	1.5	1,122	21.6	20.4
Wednesday	85	1.6	457	8.8	501	9.6	97	1.9	1,140	21.9	20.6
Thursday	63	1.2	445	8.6	578	11.1	105	2.0	1,191	22.9	22.6
Friday	88	1.7	521	10.0	568	10.9	163	3.1	1,340	25.8	25.1
Saturday	118	2.3	384	7.4	583	11.2	185	3.6	1,270	24.4	24.5
Total	716	13.8	2,938	56.5	3,617	69.6	809	15.6	8,080	155.4	150.2

TABLE 2
EMERGENCY AMBULANCE JOURNEYS — 1966

Location of Vehicle	TIME OF CALL										ALL CASES		
	Midnight—7 a.m.		7 a.m.—2 p.m.		2 p.m.—10 p.m.		10 p.m.—Midnight		1967		1966		
	No. of cases	Weekly Average	No. of cases	Weekly Average	No. of cases	Weekly Average	No. of cases	Weekly Average	No. of cases	Weekly Average	No. of cases	Weekly Average	No. of cases
Resting Point	109	2.1	1.0	739	14.2	12.6	711	13.7	15.1	104	2.0	1.8	1,663
On Road	28	0.5	1.2	611	11.8	13.0	787	15.1	17.1	57	1.1	1.7	1,483
Central Station													32.0
(9 weeks only 1966)	575	11.1	8.6	1,474	28.3	22.6	1,962	37.8	27.4	634	12.2	8.9	28.6
Fishponds													89.3
(34 weeks 1967)	2	—	2.0	92	2.7	5.8	139	4.1	7.1	6	0.2	2.6	4,645
Other	2	—	—	22	—	—	18	—	—	8	—	—	89.3
Ellbroad Street													607
(43 weeks 1966)	—	—	4.2	—	—	14.7	—	—	18.0	—	—	5.1	607
Hempflow													607
(46 weeks 1966)	—	—	2.8	—	—	7.8	—	—	10.4	—	—	3.1	607
Total	716	13.8	11.8	2,938	56.5	55.0	3,617	69.6	68.7	809	15.6	14.7	8,080
													155.4
													7,811
													150.2

TABLE 3

**EMERGENCY AMBULANCE SERVICE
TIME TO SCENE FROM RECEIPT OF CALL**

PERCENTAGE OF CASES

<i>Vehicles responding from</i>	<i>Within 9 mins.</i>		<i>Within 14 mins.</i>		<i>Within 19 mins.</i>		<i>Within 24 mins.</i>		<i>Total Cases</i>	
	1967	1966	1967	1966	1967	1966	1967	1966	1967	1966
Central	...	...	...	...	...	...	...	...	...	...
(9 weeks only in 1966)	69.7	73.0	—	—	97.9	97.5	99.5	99.0	4,645	607
Resting Point ...	68.6	70.8	69.7	91.6	97.0	97.1	98.7	99.3	1,663	1,586
On Road ...	71.2	74.0	71.5	90.2	97.4	97.2	99.2	99.4	1,484	1,722
Fishponds	...	...	...	...	...	...	...	...	...	...
(34 weeks in 1967)	75.3	71.2	68.8	92.0	90.3	89.6	97.0	96.7	99.5	98.7
Other ...	81.6	54.4	60.0	95.9	86.8	89.6	98.0	97.1	100.0	98.5
Ellbroad Street	...	...	...	...	...	...	...	...	...	...
Hemplov	...	...	...	...	...	...	...	...	...	...
All cases	70.0	72.6	71.6	90.4	91.2	91.2	97.6	97.5	99.3	99.3
	...	...	...	...	...	...	...	...	8,080	7,811
	...	...	...	...	...	...	...	...	239	910
	...	...	...	...	...	...	...	...	47	68
	...	...	...	...	...	...	...	...	—	1,810
	...	...	...	...	...	...	...	...	—	2,223
	...	...	...	...	...	...	...	...	—	1,108
	...	...	...	...	...	...	...	...	—	1,233
	...	...	...	...	...	...	...	...	8,080	7,811

TABLE 4

EMERGENCY AMBULANCE SERVICE — TIME TO REACH DESTINATION FROM RECEIPT OF CALL
(Percentages are cumulative)

<i>Area of Incident</i>	<i>Under 20 mins.</i>		<i>Under 30 mins.</i>		<i>Under 40 mins.</i>		<i>Under 50 mins.</i>		<i>Under Hour</i>		<i>TOTAL CASES</i>	
	1967	1966	1967	1966	1967	1966	1967	1966	1967	1966	1967	1966
North West	2.1	2.6	15.7	15.8	45.1	43.7	72.2	72.0	87.6	87.7	1,125	961
North East (inc. Glos.)	4.7	8.9	27.7	45.3	63.8	77.1	86.2	90.3	93.7	95.1	748	783
North Central	10.7	10.2	46.8	46.9	80.9	81.1	93.2	93.3	96.5	97.6	3,079	2,967
South Central	7.9	7.1	39.7	40.3	75.2	77.3	92.0	91.1	95.5	95.4	1,324	1,356
South West (inc. Som.)	0.8	0.6	9.6	8.9	40.2	41.4	74.0	74.3	90.1	90.4	1,290	1,239
South East	0.6	1.1	8.0	12.1	33.7	44.6	67.3	75.1	87.0	90.1	514	554
<i>Location of Vehicle</i>												
Central	6.4	7.1	31.9	36.2	64.6	65.5	85.1	84.1	93.8	93.0	4,645	607
Resting Point	5.2	6.0	28.7	33.6	62.1	65.8	83.0	85.7	91.9	93.7	1,663	1,586
On Road	7.3	8.1	31.9	35.3	63.9	69.7	83.5	86.7	93.2	94.5	1,484	1,722
Fishponds	5.4	5.6	34.3	38.6	73.6	73.3	93.7	89.6	97.9	96.2	239	910
Ellbroad Street	...	...	...	...	...	...	...	...	...	...	...	...
Hemplov	...	...	...	...	...	...	...	...	...	...	...	...
All Cases	6.2	6.4	31.1	33.2	63.9	66.5	84.7	85.6	93.3	93.6	8,080	7,811

CARE AND AFTER CARE

CARE OF THE AGED

J. F. Skone
(Deputy Medical Officer of Health)

STATUTORY SERVICES

HOUSING COMMITTEE

Most bed-sitting-room and one-bedroom flat accommodation is occupied by elderly people, and details are given below:

(a) Pre-War Estates

During the year a further three houses were converted to make six flats, making a total to date of 144 house conversions providing 288 units of accommodation.

(b) Post-War Programme

By the 31st December, 1967, 4,144 one-bedroom and bed-sitting-room flats had been completed. The units completed during 1967 were distributed as follows:

<i>Location</i>			<i>No. Units</i>
Barton Hill	...	...	12
Bedminster	...	...	12
Easton	...	...	64
Fishponds	...	...	8
Hartcliffe	...	...	70
Horfield	...	...	13
Kingsdown	...	...	132
Lawrence Weston	...	...	18
Southmead	...	...	16
			345

Some dwellings at Horfield, Hartcliffe, Fishponds, Barton Hill, Southmead, Lawrence Weston and Bedminster were built specifically for occupation by elderly persons, and altogether 151 out of the total of 345 (36 per cent) were purpose-built elderly persons' dwellings.

There are 170 one-bedroom units of accommodation under construction, 38 (22 per cent) of which are specifically for elderly persons.

(c) Proportion of Small Units of Accommodation

				<i>1-Bed and B.S.R. Flats</i>	<i>Total Number of Dwellings</i>	<i>Percentage</i>
Pre- and Post-War	...	...	...	4,758	43,112	11.1
Post-War	...	...	...	4,144	28,228	14.6
					(1968 only)	
Contracts scheduled to be completed in 1968				170	387	41.1
						(1968 only)
Projected Totals as at 31.12.68 (Post-War) ...				4,928	28,733	17.1
Contracts scheduled to commence in 1968 ...				19	158	11.8

Included in the figure of 170 is a total of 38 dwellings being built specifically for elderly persons. The figure 19 refers to elderly persons' dwellings.

Sheltered Housing

In January, 1966, the City Council approved a joint report from the Housing Committee and Welfare Services Committee regarding provision of welfare facilities for tenants of elderly persons' dwellings under the control of the Housing Committee. One of the major factors in the services to be provided by the Welfare Services Committee is the provision of wardens in suitable units of accommodation. The Welfare Services Committee have since given considerable thought to this and as a general rule intend to provide a warden where there are more than ten units for elderly people. This figure is not to be regarded as rigid but as a general guide.

The accommodation with which the Welfare Services Committee is now concerned will be elderly persons' dwellings in the following categories:

- (a) Dwellings already built and occupied—which in due course the Welfare Services Committee may decide to equip with certain facilities and/or provide a warden.
- (b) Future properties about which there has been inter-departmental discussion at the planning stage, so that upon completion they should be fully equipped and suitable for the aims and objectives of the Welfare Services Committee.

For some time, therefore, projects falling in each of the above categories will require consideration from a staffing point of view.

In July, 1966, the Welfare Services Committee submitted a report to the Establishment Committee seeking authority to appoint the first wardens. The present establishment of wardens is 17.

There are already in existence 47 groups of elderly persons' dwellings of which wardens have been appointed to 14 groups. There are three groups under construction and a further 21 are being planned with special provisions making a total of 71 groups of dwellings.

In the first instance wardens are being appointed to the larger existing and new groups of dwellings, and as this work is cleared attention will be given to the smaller groups of units.

The selection of tenants is a joint operation with social factors being fully considered. With the supportive services, many elderly people are enabled to live independently in the community.

WELFARE SERVICES COMMITTEE

The Welfare Services Committee is responsible either directly or through the agency of voluntary bodies for providing residential accommodation for persons in need of care and attention; services to handicapped people, including the blind and deaf, many of whom are old; safeguarding the property of people admitted to hospitals or other institutional accommodation; burials or cremations where no relative can assist; and meals to old and infirm people living in their own homes and the provision of club facilities for elderly people.

The details and capacity of accommodation provided under Part III of the National Assistance Act can be summarised as follows:

*100 Fishponds Road	...	...	...	288
5 All Saints Road	...	...	...	17
119 Pembroke Road	...	...	...	20
159/161 Redland Road	...	...	...	22
9 Priory Road	...	...	...	21
"Gleeson House," Oldbury Court	...	...	...	45
"St. Peter's," Bishopthorpe Road	...	...	...	45
"Meadowsweet," Small Lane, Fishponds	...	...	...	194
"Hollybrook," Hartcliffe	...	...	...	54
"Rushlands," Lawrence Weston	...	...	...	54
"Hazelbrook," Henbury	...	...	...	52
"Elm Hayes," Highridge	...	...	...	59

	Total	...		871

*Excludes temporary accommodation.

The decision of the Committee to run down 100 Fishponds Road and replace the accommodation by building new homes of 50-60 bedded capacity continues to be implemented and this should be completed by 1971.

The Department supervises 30 homes for old people accommodating 575 residents registered under Section 37 of the National Assistance Act, 1948, while 33 blind people live in three homes administered by Bristol Royal Workshops for the Blind.

Advice on health matters is given and administrative health arrangements are made by the Medical Officer of Health on behalf of the Welfare Services Committee and general practitioners provide general medical services for the residents of the Council's homes.

MOBILE MEALS

The mobile meals service is provided by the Welfare Services Committee, and delivered by the Committee's own staff, Bristol Old People's Welfare Incorporated, and the Women's Voluntary Service. By the end of 1967 5,200 meals per week were being provided, and delivery was on five days a week. Of this number of meals approximately 3,500 per week were provided by the kitchen built by the Committee in Bedminster and opened in August 1967.

HEALTH COMMITTEE

The Health Committee is responsible for domiciliary services for many old people including:

Chiropody Service

The total number of patients receiving treatment during 1967 was as follows:

Elderly patients (at clinics, domiciliary visits and Welfare Homes)	...	7,161 patients
Of these, 4,767 patients were still under clinical treatment at end of year,		
1,710 patients were on domiciliary list at end of year,		
837 patients were residents of Welfare Homes at end of year.		
Physically handicapped patients	... ..	83 patients
38 on clinic list at end of year.		
27 on domiciliary list at end of year.		
Expectant mothers	... ..	6 patients
3 still on clinic list at end of year.		
School children	... ..	1,224 patients

All first treatments.

Total number, all sources, 8,474 patients.

The total treatments given were as follows:

In clinics	...	...	...	...	...	...	...	...	21,046
Domiciliary treatments	...	...	...	...	...	...	...	...	9,466
(of these, 3,184 treatments were given by private practitioners on a fee-per-treatment basis)									
In Welfare Services Committee Homes for the Aged	...	...	...	...	...	...	...	...	3,421
School children (in clinics)	...	...	...	...	...	...	...	...	5,809
Total treatments									39,742

To indicate the turnover of patients, the following were new additions and discharges:

In clinics—1,113 were new cases, and 474 were discharged.

Domiciliary list—727 were new cases and 462 were discharged.

The residential list of patients in *Welfare Homes* remains more or less the same.

School children—1,224 are all new cases, and subsequently discharged.

It is worth recording that there is a new addition of approximately 25 per cent to the clinical treatment list yearly, whilst there is a discharge rate of approximately 10 per cent. This increasing demand is primarily the reason for waiting lists building up during each year. Instructions have been given to all clinics (excepting Charlotte Keel) to book in patients asking for their first appointment, rather than, as has been the case in the past, to hold them on a waiting list. In the instance of Charlotte Keel clinic, this would not be possible as there is already a waiting list of 112 patients, which will require additional sessions to accommodate them as this clinic is already severely overloaded. Some of these patients have been on the waiting list since April 1967.

The total number of approximately 40,000 treatments reflects credit on the part of the chiropody staff, in ensuring a full attendance, and no appointments are wasted.

This has been effected by overloading the appointment books, at the risk of all patients attending, and having to work very hard to keep pace with the case-load.

Three members of the full-time staff had prolonged absences from duty due to stay in hospital. This collectively amounted to 22 weeks.

It is gratifying to note the increasing number of school children having treatment for foot troubles. It is at this age that the greatest good can be done in ensuring a better standard of foot health for the future.

Retirement Clinics

Dr. Patricia Thomas reports:

The two retirement clinics have continued at St. George Health Centre and Corbett House and a total of 318 patients were examined from the following sources.

		New Patients						Old Patients		
		From Age/Sex Register			Referred by General Practitioner					
		M	F		M	F		M	F	
St. George	...	90	42	48	51	21	30	75	21	54
Corbett House	...	32	16	16	55	28	27	15	2	13

The outstanding findings during the year were three undiagnosed diabetics, one thyrotoxicosis, one ovarian cyst, two severe anaemias, one early congestive heart failure (who had not attended her general practitioner for 18 months), one aortic stenosis, amenable to surgery, one auricular fibrillation, a patient crippled with intermittent claudication, who had not attended his doctor for two years and has

now been treated by surgery; one large rodent ulcer and four patients with early chronic glaucoma and two with cataract who have all been referred to Bristol Eye Hospital.

As in previous years the most usual findings have been patients with multiple minor disabilities, which left untreated would in a few years become disabling. These findings are summarised as follows:

NEW PATIENTS						<i>St. George</i>		<i>Corbett House</i>	
						<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>
1. Underweight (referred to dietician)	...	...	...	...	...	2	5	2	1
2. Overweight (referred to dietician)	...	...	...	...	...	10	27	5	21
170									
3. High B.P. > —	...	...	...	...	...	9	11	5	11
110									
4. Low Hb. <80%	...	...	...	...	...	2	5	0	3
5. Abnormal E.C.G. (i) with symptoms	...	...	...	...	...	10	5	6	8
(ii) without symptoms	...	...	...	...	...	1	1	1	0
6. Urine (a) Ca.	...	...	...	...	...	20	21	6	3
(b) Alb.	...	...	...	...	...	1	1	0	0
(c) Sugar	...	...	...	...	...	2	0	0	1
7. Referred for Physiotherapy	...	...	...	...	...	4	11	5	4
8. Referred to Chiropodist	...	...	...	...	...	8	24	12	12
9. Referred to Optician	...	...	...	...	...	5	17	8	5
10. Hearing defect	...	...	...	...	...	8	5	10	4
11. Referred to Hospital	...	...	...	...	...	3	4	4	1
12. Referred to dentist	...	...	...	...	...	1	0	2	3
13. Chronic bronchitis and emphysema	...	...	...	...	...	11	1	4	2
14. Arthritic conditions	...	...	...	...	...	6	13	8	18

OLD PATIENTS						<i>St. George</i>		<i>Corbett House</i>	
						<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>
1. After Physiotherapy									
Improved	...	...	...	...	...	3	11	3	0
Not improved	...	...	...	...	...	0	0	0	0
2. Hb. after treatment for Anaemia									
Static	...	...	...	...	...	0	2	0	0
Raised	...	...	...	...	...	5	8	0	2
3. Overweight after diet									
Lost	...	...	...	...	...	5	23	4	8
Gained	...	...	...	...	...	0	5	0	2
4. Underweight after diet									
Lost	...	...	...	...	...	5	23	0	0
Gained	...	...	...	...	...	0	5	0	2
5. B.P. Down	...	...	...	...	...	4	3	2	0
Up	...	...	...	...	...	1	0	1	6
6. Chronic bronchitis after breathing exercises									
Worse	...	...	...	...	...	0	0	0	0
Better	...	...	...	...	...	3	1	2	1
7. Urinary Ca. after course of Calcium									
+	...	...	...	...	...	1	1	0	0
-	...	...	...	...	...	2	6	10	6

Health Visiting Service

The special health visitors dealing with the sick and aged visited 1,825 new cases compared with 1,854 in 1966. However, other cases visited during the year totalled

2,488 making a total of 4,313 cases seen. The corresponding figure for 1966 was 3,813.

The total visits paid during the year were equally shared by the special health visitors and their assistants. Together they paid 13,997 visits compared with 12,958 in the previous year. In addition to these visits by the special staff, the district health visitors also paid 1,361 visits to the aged.

The following is a summary of cases visited for the first time in the current year by the special health visitors and their welfare assistants:

	<i>Males</i>	<i>Females</i>
1. 65 years of age and over	1,201	2,756
2. Under 65 years of age	99	257
3. Number in "1" visited at special request of G.P. or hospital ...	1,198	
4. Mentally disordered persons	8	
5. Number in "4" visited at special request of G.P. or hospital ...	7	
6. Persons discharged from hospital other than mental hospitals ...	378	
7. Number in "6" visited at special request of G.P. or hospital ...	372	
Total number of household visits during the year ..	12,911	

Home Help Service

At the end of the year there were 15 full-time and 710 part-time home helps, a decrease of one full-time and an increase of 32 part-time home helps as compared with the previous year.

Home helps gave 678,404 hours of help during the year; 649,510 hours, or 96 per cent of all hours worked by home helps were devoted to the assistance of a total of 4,071 old and chronically sick people, an increase of 143 compared with 1966.

Home Nursing Service

There were 70 full-time and 9 part-time Queen's Nurses and 33 students trained.

A total of 230,864 visits were made during the year compared with 203,130 in 1966.

Laundry Service

The Laundry Service, organised by the Department, continued during the year, using the same facilities as in previous years. There was again a slight increase in the number of persons using the service and this is reflected in the number of articles laundered and the visits necessary to effect exchange. Transport for the collection of soiled linen and delivery of laundered sheets and gowns continued to be provided by the staff at the disinfecting station, whilst the actual laundering of the articles was carried out in the laundry operated at 100 Fishponds Road by the Welfare Services Department.

Details of the service were as follows:

Number of visits	16,796
Articles laundered	42,827
Mileage	15,256

The number of persons for whom the service was provided was 561. Of these, 217 patients were transferred from 1966. In addition sheets and gowns were issued on temporary loan to 61 patients, but laundry facilities were not required.

The Health Committee contributed £350 to the Bristol Old People's Welfare (Voluntary) Ltd., towards the laundry service maintained by that organisation.

Night Watcher Service

There were 1,408 nights worked and the service was given to 153 patients.

Samaritan Fund

Income and expenditure show an appreciable decrease on recent years.

Donations were received from St. Martin's-in-the-Field Christmas Appeal Fund, £75; Mrs. I. James, £8; Mrs. Chick, £5; Mrs. Bull, £12 12s. 0d.; and various smaller donations, £3 8s. 6d.

				£
Balance at 1st January, 1967	...			316
Income	...	...	...	889
				<hr/>
				1,205
Expenditure	...	...	...	919
				<hr/>
Balance at 31st December, 1967	...			286
				<hr/>

VOLUNTARY SERVICES

BRISTOL OLD PEOPLE'S WELFARE INCORPORATED

This voluntary body, which receives a grant from the City Council, provides the following services:

Accommodation

“Anchor House” in conjunction with the Anchor Society—11 unfurnished flatlets with sitting-room and dining-room; lift; central heating. Mid-day meal provided.

“Beverley Cottage,” Burnham-on-Sea—a holiday rest home for 20 frail elderly people.

“Cote”—21 unfurnished flatlets and guest room for able-bodied elderly people in middle income group; lift; central heating. Mid-day meal provided.

“Cowlin House”—10 unfurnished flatlets similar to “Cote.”

“Cowlin House Rest Home”—adjacent to “Cowlin House.” Accommodation for 14 frail elderly people; own rooms; full board; central heating; lift. Communal sitting-room, T.V. room and dining-room. Trained nurse in charge.

“Dulverton House”—accommodation for 26 frail ambulant men and women; 16 single rooms; other residents share cubicled rooms. Trained nurse in charge; central heating and lift. Sitting-room, dining-room and T.V. room.

“Hanbury Court,” Hanbury Road, Clifton—14 self-contained flats, bed-sitting-room, one-bedroom and two-bedrooms with own kitchens and bathrooms, etc. Emergency call system to “Cowlin House.”

“New Cote Rest Home”—accommodation for 16 frail elderly people. Trained nurse in charge; central heating; sitting-room, television, etc.

“Restleigh,” 3 Worcester Road, Bristol 8—under reconstruction as flatlets.

“Stockwood”—150 self-contained flats for elderly people on three sites with day room, launderette and warden services on each.

“Stratheden”—27 unfurnished flatlets for able-bodied elderly people. Lift. Mid-day meal provided.

Day Centre

A Day Centre for house-bound elderly people is run in the Day Room, Linden Close, Stockwood, two days a week. Elderly people are collected from Knowle, Whitchurch, Stockwood and Brislington and cared for from mid-morning until 3.30 p.m. Mid-day meals provided as well as morning coffee and afternoon tea. Crafts, games, books, etc., supplied. Charge 3s. 6d. per day.

Laundry Service

Laundry is collected from and delivered to approximately 150 old people living in their own homes, and washing is carried out in a launderette situated in the basement of "Stratheden."

Friendly Visiting

Volunteers help with shopping, mending, etc., of elderly people in all parts of the City.

Holidays

Convalescent holidays subsidised from voluntary funds are arranged annually for about 150 infirm old people and about 1,250 able-bodied elderly are sent for holidays in seaside hotels and guest houses.

Spring coach tours were arranged for over 6,000 elderly people in 1967.

Mobile Library

Forty-four volunteers take books by van to about 180 old people in their own homes. There is a stock of about 1,500 books including an excellent supply of large print books and a charge of 1d. per week is made towards transport costs.

Miscellaneous Services

These services include assistance with clothing; the loan of blankets; wireless for the housebound; the loan of sick-room equipment; comforts; advisory service and the distribution of coal, fruit, flowers, firewood, etc.

Liaison Officer for Voluntary Visiting Services

This appointment is grant-aided by the Welfare Services Committee. The liaison officer—

- (1) acts as a link between all organisations in the City running voluntary visiting services for the aged; those in need of help and advice with helpful agencies, and those offering particular skills or voluntary service with those best able to utilise them;
- (2) disseminates information through frequent issue of the newsletter, "The Link."

Clubs for Elderly People

The Bristol Association for Elderly People has established and equipped full-time clubs for old people and the administration is in the hands of the members of the clubs. They are opened daily, some opening in the morning but the majority at about

2 p.m. and remain open until about 9 or 10 p.m., according to particular activities. The entire emphasis is upon social activity which the Association believes is an extremely important service for elderly people. The Welfare Services Committee is keenly interested in this work and has made substantial grants towards new projects.

The existing clubs are as follows:

Club for Elderly People, Recreation Ground, Sea Mills
 Club for Elderly People, 100 Fishponds Road, Bristol 5
 Club for Elderly People, Wiek Road, Brislington
 Club for Elderly People, 112 Avonvale Road, Bristol
 Club for Elderly People, Greystoke Avenue, Southmead
 Club for Elderly People, Beechwood Road, Fishponds
 Club for Elderly People, Redeatch Road, Knowle
 Club for Elderly People, Avonmouth Road, Avonmouth
 Club for Elderly People, Romney Avenue, Lockleaze
 Club for Elderly People, Tithe Barn Club, High Street, Shirehampton
 Club for Elderly People, Burlington Road, Redland
 Club for Elderly People, Broadoak Road, Withywood
 Club for Elderly People, Machin Road, Henbury

During the year a new club, the Princess Elizabeth Club, was opened in Myrtle Street, Bedminster, to replace the former club in Mill Lane.

The club in Princes Place, Gloucester Road, was closed during the year and a new club will be opened in Denmark Place during 1968. A club at Summerhill Road, St. George, is due to be opened early in 1968.

Mobile Physiotherapy Service

Physiotherapists	...	...	3
Mobile vans	...	...	3
Number of cases brought forward 1st January	...		53
Number of new cases attended during the year	...		252
	Total	...	305
Patients recommended by Hospital Consultants	...		30
Patients recommended by General Practitioners	...		222

<i>Age Group</i>	<i>New Cases</i>	
0-4	7	
5-14	2	
15-64	71	
65+	172	
Total number of visits to all patients	...	4,125

<i>Treatment given</i>		
Massage	...	1,863
Electrical	...	1,660
Exercises	...	2,924

The treatment is recommended by general practitioners, orthopaedic surgeons and hospital consultants.

Where patients are referred by hospital consultants a fee of 15s. 0d. is paid by the Regional Hospital Board. Otherwise there is no fixed charge and patients contribute according to their means.

Contributors to the Bristol Hospitals Fund and Bristol Contributory Welfare Association may claim limited payment for mobile physiotherapy treatment. W. D. & H. O. Wills, through their employees' health scheme, continue to give active support to the service.

CARE OF HANDICAPPED PEOPLE (ADULTS)

Local Health Authority Services

Report of the Senior Medical Social Worker, Marion Moncaster

OCCUPATIONAL HEALTH

The Social Worker dealt with 49 cases referred for help during the year, and the Senior Medical Social Worker with eleven whose problems were more complex. The survey regarding retired Transport and Cleansing employees mentioned in the report of the Senior Medical Officer for Occupational Health, was also started.

During the infancy of a new service the source of referrals is of special interest, as is also the type of problem met with, as the first reveals gaps in knowledge of the service, and the second, by showing examples of actual need, gives pointers as to possible unmet needs. Also included is a table showing the Departments in which the employees worked.

Referrals

1. Senior Medical Officer for Occupational Health	...	...	...	...	34
2. Employer direct to Social Worker (as distinct from a first referral to the Senior Medical Officer, and subsequent referral by him to Social Worker)	...	...	...	...	2
3. Housing safety and Welfare Officer	...	...	...	...	3
4. Self (six of whom known to previous worker)	...	...	...	...	7
5. Other Corporation employee	...	...	...	...	1
6. Followed up by Social Worker from previous year's cases	...	...	...	...	3
7. Disablement Resettlement Officer	...	...	...	...	5
8. Medical or other Social Worker	...	...	...	...	5
					<hr/> 60

Type of Problem

1. Failure to function effectively at work because of personality difficulties	...	...	...	...	5
2. Adjustment to early and inevitable retirement	...	...	...	...	8
3. Adjustment to disability while still working	...	...	...	...	2
4. Resettlement in work outside the Corporation	...	...	...	...	9
5. Resettlement in work inside the Corporation	...	...	...	...	5
6. Need for support to one partner of married couple during sickness or after the decease of the other	...	...	...	...	9
7. Need for support to family where both partners were suffering ill-health	...	...	...	...	2
8. Financial	...	...	...	...	9
9. Marital disharmony	...	...	...	...	3
10. Care of sick elderly relative	...	...	...	...	3
11. Need for terminal care	...	...	...	...	1
12. Housing	...	...	...	...	1
13. Family difficulty aggravated by bad housing	...	...	...	...	1
14. Personal	...	...	...	...	2
					<hr/> 60

Employing departments

<i>Department</i>								<i>Number of cases</i>
Architect's	...	...	...	...	...	...	...	1
Baths	...	...	...	...	...	...	...	1
Cemeteries	...	...	...	...	...	...	...	1
City Engineer's	...	...	...	...	...	...	...	10
City Valuer's	...	...	...	...	...	...	...	2
Education	...	...	...	...	...	...	...	5
Health	...	...	...	...	...	...	...	11
Housing	...	...	...	...	...	...	...	15
Museum	...	...	...	...	...	...	...	1
Port of Bristol Authority	...	...	...	...	...	...	...	3
Printing and Stationery	...	...	...	...	...	...	...	1
Transport and Cleansing	...	...	...	...	...	...	...	8
Welfare Services	...	...	...	...	...	...	...	1
								—
								60
								—

It is interesting and understandable to find that the majority of referrals came from the Senior Medical Officer for Occupational Health, with whom the social workers maintain close contact. The referrals from the Disablement Resettlement Officer concerned Corporation employees who were having health difficulties in their present jobs. They were probably not aware that the Occupational Health Service might have helped them before they felt the necessity to seek help outside the Corporation. In one of these cases a special request was made that the Senior Medical Officer for Occupational Health should not be told about the referral, and when the social worker visited the person concerned she found that this was because he feared that an interview with the Senior Medical Officer would mean automatic retirement on health grounds. When he was assured that this was not so and Dr. Markham's opinion was advisable the man felt confident enough to see him. The social worker met with a misconception about her own work also, which she is striving to correct, this being that her services can only be obtained after consultation with the Senior Medical Officer for Occupational Health. Having this idea might deter people from seeking help or advice at a time when it is most needed. The number of referrals from employer direct to social worker is as yet disappointingly low and points to lack of knowledge of her function or of the service.

It will be seen from the above that the introductory task of 1965 and 1966 has remained as a continuing problem in 1967, i.e. that of finding those in need of and wanting help. In this connection, however, a basic consideration has been not to interfere or overlap with existing services. All Departments pride themselves in varying degrees, on their care of employees during sickness and it would be unprofitable, if not positively harmful, to undermine existing patterns.

The selection of those in need is a difficult task both for those in charge of staff and for the social worker. Length of time off sick is one criterion which could be used, but is not a certain guide as a person living alone with influenza, who is only off work for a short period, might profit from help more than a person well looked after at home who is off for several months. At the same time, one case came to light during the year in which the social worker could have helped, yet her aid was not sought. This was a man living in lodgings, who had been off sick a long time, and whose circumstances and serious nature of his illness were known to his superior officer, but who was not referred to her, and only heard about when he was reaching the end of life. In this connection it is perhaps interesting to record that the

social worker held a consultation with an executive officer of one of the Corporation's larger Departments who had been most helpful in submitting sickness returns. This officer was invited to look through the names of those persons who had been off sick for more than a month, and was of the opinion that only one out of the 15 people concerned might need help. However, out of this meeting, came the suggestion that a talk should be given by the social worker to the heads of certain subsections about the service, and this positive move would indicate that such consultations are worth pursuing. It is also the intention that social workers shall make particular enquiry about personnel after long sickness absence in case there are difficulties in which help could and should be given.

PREVENTION OF TUBERCULOSIS

The Chest Clinic is served by two teams of consultant chest physicians, and working with each team is one social worker assisted by a trainee social worker.

During the 12 months ended December 1967 the social workers saw a total of 1,014 patients. Of these 681 were interviewed prior to their hospital admission in the Bristol area, to ensure early diagnosis of social problems.

Patients with tuberculosis admitted to Ham Green Hospital were followed up in hospital by the local authority social workers who made weekly visits to the wards.

Although only those with pulmonary tuberculosis were seen in hospital, a great deal of work was undertaken with patients suffering with other chest diseases, either on their discharge from hospital when they returned as out-patients to the Chest Clinic, or with patients who were treated at home.

It was interesting to note the decline in the number of patients suffering from tuberculosis, but the gradual increase in diseases such as chronic bronchitis and carcinomas and other chest and heart conditions. Much of this work was in the field of long-term casework even if only in a supportive role.

Below is a classified table of patients in this last group:

Total for 12 months January--December 1967 :				
Male	...	...	...	238
Female	...	...	...	95
				<hr/>
				333
				<hr/>
New cases from January 1967	...	...	...	149
Old cases carried from previous year	...	...	...	184

It is interesting to note the number of old cases carried by the social worker and a higher percentage of men to women seen.

Within this 333, the diseases can be broadly classified as follows:

Tuberculosis	...	...	...	95
Chronic bronchitis	...	...	...	60
Carcinomas	...	...	...	39
Other*	...	...	...	139

*Cor pulmonale, Asthma, Emphysema.

Help given, in the main, related to housing, finance and employment.

Housing problems have reduced over the years, partly due to the fact that we have fewer ill people suffering from tuberculosis and partly due to the general raising of housing standards and the success of the rehousing programme of the Corporation.

With the increase in Social Security payments and the introduction of earnings related benefits the number of people in immediate financial difficulties has reduced and this, together with the fact that the illness assessment of many patients is only of short duration, means that fewer financial problems are presented by this group, and those which do occur are more usually associated with other more complex factors, leading to mismanagement. Because of the inadequacy, however, of long-term statutory allowances, acute poverty is a common experience for those who suffer from chronic and deteriorating illness and with the increase in numbers attending the Chest Clinic with bronchitis and carcinomatous conditions, financial assistance from voluntary sources is often needed. This is readily given by organisations such as the Bristol Tuberculosis Voluntary Care Committee and the National Society for Cancer Relief.

One of the continuing problems is the shortage of suitable open or sheltered employment for those suffering from chronic bronchitis, particularly among men in later middle age.

There was a noticeable increase in the number of vagrants coming to the Chest Clinic after arriving in the City. Many of them had to receive hospital in-patient treatment, but moved on soon afterwards, often before the social worker could follow them up.

CARE AND AFTER CARE

This year there has been a significant change in the type of case referred for case-work help, in that the majority had malignant conditions and many were reaching the terminal stage of illness. The primary task has been the support of close relations, most commonly husband or wife, son or daughter, in helping them to cope with their own feelings of distress about impending loss and the fear and revulsion of malignant disease, while at the same time meeting the physical and emotional needs of the patient who is frequently unaware of the serious nature of the illness from which he is suffering. The strain of concealing this knowledge is hard to bear for those who have lived in mutual trust and love and sometimes almost unendurable for those whose relationships have been strained and unhappy.

The former may partly overcome their feelings of isolation by the solace of offering comfort through the medium of physical care whereas the latter find a closer physical contact adds to their difficulties. Maintenance of a relationship with a social worker can help to relieve tension and bring fears into the open and help both patient and relatives to gain strength to face death and the survivors to adjust more quickly to whatever changes may be inevitable. Where the illness is long and painful much practical help is needed to enable the patient to be successfully cared for at home, either through the nursing and home help services or the Marie Curie Foundation for temporary or permanent nursing home care, or the National Society for Cancer Relief if the need is financial.

Long-term support has also been necessary for patients suffering from chronic and deteriorating illness and of the number seen regularly for this purpose, more than half are unsupported mothers, one is cohabiting, and just over a quarter single women are living alone. The second largest number of cases, similarly affected, required help either individually or as families to adjust physically and emotionally to disabling illness and its social consequences.

A smaller number who had had similar difficulties over adjustment were helped towards a return to employment after long periods off work.

As yet, only a small proportion of the total caseload is preventive, since only six were referred as having presented their problems in the guise of symptoms of illness, but this does give some slight indication of the need for social work in general practice.

Quite a high proportion of the total number referred had a history of disturbed social and family relationships or personality difficulties which reduced their capacity to meet the stress of illness and loss of independence, and while some have been able to make use of casework to assimilate or come to terms with this experience, many will require continued assistance.

An analysis of cases, sources of referral and age groups is given below.

<i>No. of cases</i>				<i>Sex</i>			
New	...	...	44	Male	...	...	25
Old	...	...	30	Female	...	...	49
<i>Medical conditions</i>							
Carcinomas	...	...	20	Asthma	...	...	1
Beurger's disease	...	...	1	Glaucoma	...	...	1
Myomatosis	...	...	1	Head injuries	...	...	1
Rheumatoid arthritis	...	...	10	Birth injury (spastic)	...	...	1
Diabetes	...	...	1	Congenital abnormality	...	...	2
Heart disease	...	...	5	Congenital abnormality	...	...	1
Cerebral thrombosis	...	...	4	(thalidomide)	...	...	1
Gastric ulcer	...	...	2	Osteoporosis	...	...	1
Disseminated sclerosis	...	...	2	Narcolepsy	...	...	1
Minor illnesses	...	...	6	Paget's disease	...	...	1
Jacksonian epilepsy	...	...	2	Ulcerative colitis	...	...	1
Bronchitis	...	...	2				74
Bronchial asthma	...	...	1				
Depression	...	...	2				
Personality disorders	...	...	4				

Reasons for referral

Financial	...	...	...	...	...	14
Re-employment	...	...	...	...	...	7
Temporary nursing care	...	...	...	...	...	1
Rehousing	...	...	...	...	...	1
Difficulties of adjustment to loss or early death	...	...	...	...	...	8
Family problems	...	...	...	...	...	3
Long term support (7 unsupported mothers, 4 single women living alone)	...	...	...	...	...	13
Change of accommodation	...	...	...	...	...	1
Permanent care	...	...	...	...	...	2
Difficulties of adjustment to disability	...	...	...	...	...	15
Personality difficulties	...	...	...	...	...	2
Marital problems	...	...	...	...	...	7

Age groups

10-19	20-29	30-39
3	5	5
40-49	50-59	60-69
13	29	10
70-79	80-89	91-100
6	2	1

Sources of referral

Health visitor	...	...	...	10
District nurse	...	...	...	1
Medical officer	...	...	...	3
Self	...	...	...	5
Council for Disabled Adults	...	...	...	1
Hospital M.S.W.'s	...	...	...	44
Mental welfare officer	...	...	...	1
General practitioner	...	...	...	6
Relative	...	...	...	1

THE BLIND AND PARTIALLY SIGHTED

Examinations for the registration of blind and partially sighted are arranged through the Welfare Services Department and carried out at the Eye Hospital or consultants' rooms. Five consultants co-operate in this scheme and undertake domiciliary visits as necessary.

During 1967, 202 persons were seen at home or attended the clinic:

- 124 were registered as blind;
- 46 were registered as partially sighted;
- 18 not registrable
- 8 remained on partially sighted register
- 1 remained on blind register
- 1 blind person de-certified
- 3 partially sighted persons de-certified
- 1 did not desire registration.

The diseases causing blindness or partial sight were as follows:

			<i>Cataract</i>	<i>Glaucoma</i>	<i>Macular Degeneration</i>	<i>Other</i>
Blind	...	...	30	21	28	45
Partially sighted	...	...	12	6	12	15

Eight children were placed on the register with the following diagnoses:

1 Optic atrophy	Blind
1 Optic atrophy	Partially sighted
1 Aniridia and partial albinism	Partially sighted
1 Cerebral hypoplasia	Partially sighted
1 Uveitis	Partially sighted
3 Nystagmus	Partially sighted

Patients are referred through the usual channels and the register of blind and partially sighted is kept by the Welfare Services Department.

BRISTOL TUBERCULOSIS VOLUNTARY CARE COMMITTEE

The Secretary, Miss M. Grigg, reports as follows:

In viewing the work of the Care Committee for the last year, it is felt that the action taken in extending the activities to cover other diseases of the chest and heart has been amply justified, and again this year the help extended to people suffering from diseases other than tuberculosis has far exceeded that given to the tuberculous.

The acquisition of the third caravan has meant that during 1967, 52 adults and 27 children spent two weeks' holiday at Sandy Bay Caravan Camp. The pleasure of travelling by car greatly enhanced the enjoyment of the holidays, and again the W.R.V.S. arranged the transport and a total mileage of 9,315 was covered during the holiday period. In addition, 29 people not fit to have caravan holidays spent two weeks at a number of excellent private hotels and boarding houses situated at Exmouth, Weston, Clevedon, and Portishead, at a cost of £618.

Last Christmas nearly 200 people were given a Christmas parcel and in addition 2 cwt. of coal, the total expenditure being about £500.

The finding of £5 for the renewal of a television licence is often almost an impossibility for people living on reduced incomes, and during the last year some £133 was spent on renewing licences. The Committee continues the practice of providing rented television sets for people who would not otherwise be able to afford this relaxation.

Despite the fact that with careful husbanding the Committee are now in a much better financial position, we are still spending to our limit and must continue to spend with care if we are to keep a little reserve for any capital expenditure which might be necessary in order to help our patients to the full extent.

SERVICES PROVIDED BY VOLUNTARY ORGANISATIONS ON BEHALF OF THE WELFARE SERVICES COMMITTEE

(a) Blind and Partially Sighted

The General Superintendent of the Bristol Royal Workshops for the Blind, Mr. E. H. Getliff, O.B.E., has sent me the following notes:

The Bristol Royal School and Workshops for the Blind have continued provision of a variety of services to blind persons of all ages and have worked in close association with all local authorities and government departments concerned with the provision of services to blind persons.

The position in the Bristol Royal School for the Blind is giving rise to serious administrative concern by the Committee owing to the happy reduction in the number of blind pupils throughout the West of England. There are now only 42 pupils in the school and during the next six months this number will be very considerably reduced. From September next the school is to become a junior school for pupils from 5 to 12 years of age. The Committee are in close consultation with the Department of Education and Science as to the future of the school. Suitable pupils continue to transfer to the grammar schools for the blind or, at 16 years of age, to vocational assessment centres.

The Workshops for the Blind provided employment for 73 blind or disabled sighted persons, of whom 55 are Bristol "cases." Changes in the system of wage payments in Workshops for the Blind have brought some alterations to the general aspect of this form of sheltered employment. Conditions of employment in Workshops for the Blind are now governed by decisions by the newly-formed National Joint Industrial Council for the Workshops for the Blind. The Workshops Committee continues to control and administer the work of the Workshops in liaison with local authorities and the National League of the Blind. Efforts are being made to obtain

new forms of employment for blind persons in the workshops. The small upholstery department is now progressing satisfactorily and all departments at the present time are busy on orders following a period of some recession due to the restraints placed on industry by legislation.

The Home Workers' Committee continues to administer a scheme on behalf of 11 local authorities and for some 70 blind home workers. Average earnings show a substantial increase throughout the year and increases in augmentation payments resulted from national consultation; these are now based on a sliding scale with local authorities accepting the non-deterrent clause so that no home worker would be financially worse off than under previous arrangements. The whole position of home workers' schemes is now under consideration by a National Committee and the Ministry of Labour is to set up a working party to review home workers' schemes in general at national level.

Resident accommodation has been provided for elderly blind persons and for some employees in the Hostel for Blind Women and the three homes for elderly blind persons. In co-operation with Welfare Services Committee of the Bristol City Council, the Homes Management Committee of the Bristol Royal School and Workshops for the Blind is now in the process of closing one of the homes for the blind. Resident accommodation will continue to be provided by the other two homes for the blind with the position under constant review by the appropriate Committee and the Welfare Services.

(b) Persons Handicapped by Deafness

The Rev. S. W. Hartnoll, B.A., B.D., Principal Welfare Officer for the Deaf, Bristol Institute for the Deaf, has sent me the following notes—

For persons in Bristol who suffer from "a disabling loss of hearing," specialised welfare services are provided by Bristol Institute for the Deaf. This is a voluntary society acting as the agent of the Corporation of Bristol for the purposes of the National Assistance Act, 1948.

The Society also serves a number of people living in districts in Somerset and Gloucestershire which are adjacent to Bristol.

The Society provides a comprehensive welfare service under two main headings—casework with individuals and families, and a wide range of social activities.

The primary aim of the Society is to help persons handicapped by deafness to find a secure place within the community. But the strain of deafness in a hearing environment is considerable and so the secondary aim, not opposed to the primary aim, but in harmony with it, is to provide at the Institute opportunities for recreation and facilities for worship and for the service of other people.

A member of the Institute's staff, the Rev. D. H. Bozon, M.A., acts as Secretary of the Bristol and District Deaf Children's Society. Its purpose is to provide a meeting-place for parents and others—doctors, teachers, social workers, friends—who are interested in the welfare of children with a hearing handicap. All meetings are held at the Institute.

Relationships with other agencies have continued to be cordial. This is particularly so of relationships with the Social Services, and Education, Committees and Departments of the Corporation.

Details of the Bristol Registers on 31st December, 1967, are as follows:

<i>Age</i>		<i>Sex</i>	<i>Deaf with speech</i>	<i>Deaf without speech</i>	<i>Hard of hearing</i>	<i>Totals</i>
Under 16	...	Male	35	27	30	92
		Female	33	16	24	73
16-64	...	Male	46	84	69	199
		Female	41	84	104	229
65 and over	...	Male	3	19	46	68
		Female	4	21	102	127
Totals			162	251	375	788

For all the varied purposes of its work, the Bristol Institute for the Deaf has an excellent building at 16-18 King Square, Bristol 2.

MEDICAL SOCIAL WORK IN A SPECIAL TREATMENT CLINIC

Mrs. J. Merchant

(Social Worker)

It is very encouraging to find that the majority of patients accept responsibility for bringing in contacts and are appreciative of the help given them in handling delicate situations.

Difficulties of contact tracing usually occur because of the casual nature of so many relationships. There are several categories of drifters who work intermittently or not at all and are of no fixed abode; some move about within the City and its environs and others fluctuate between this and other areas. The increase in the number of young people who have "opted out of our society" is adding to the problem because they are inclined to reject treatment and because they stem from and occasionally infiltrate back into so many different social groups. The development of the City as a major entertainments centre is inevitably attracting short-term visitors who are subsequently difficult to trace.

Often after finding a contact, exhaustive efforts have to be made to ensure completion of treatment. Another group who require constant follow-up are immigrants who are under observation. Unfortunately, some of these families imagine that they are being singled out on racial grounds or because unions may be irregular by our social conventions.

The social worker often serves a useful purpose at a single interview simply as a sympathetic listener at a moment of stress. Sometimes long-standing problems are brought out into the open for the first time; most of the people with these are referred to other social workers or agencies; a few, however, require continuing support.

A worrying feature of the present rebellion by a section of teenagers is the proportion of intelligent girls who have left apparently good homes and have taken to prostitution in order to obtain money for drugs—usually cannabis, which they then share with their friends as a group social activity. By keeping in touch with this group it is sometimes possible to help rehabilitate a girl when the excitement begins to pall, or she becomes pregnant and may have to be persuaded to accept ante-natal care.

The monetary grant from the V.D. Voluntary Care Committee has proved useful for emergencies and has helped one young couple to set up home again after separation.

In two cases employers have requested help to prevent industrial strife threatened by employees who refused to work with patients known to be attending a clinic. There is still considerable fear due to ignorance surrounding V.D.

Lectures have been given locally to medical students and student nurses and to health visitors at Cheltenham. Talks and discussions have been held with statutory and voluntary bodies and it is hoped to extend these in the coming year. An understanding of the particular problems of young people is vitally important to this work and links with groups of young people and with those working with them are being actively sought.

SOCIAL WORK AT ST. GEORGE HEALTH CENTRE

Miss Rachel White, Cert. Soc. Work

(Social Worker)

The Health Centre is situated on the outskirts of Bristol which is mainly a residential area of private and council houses. There is some light industry and several shopping areas. Quite a large catchment area is served by this Centre.

Two executive group practices are housed in the Health Centre, one practice comprised of five general practitioners at the beginning of the year, and the other of three general practitioners.

It was originally planned that the social worker should allocate one full day per week on this work, spending the morning at the Centre and devoting the afternoon to home visiting. The actual time worked by the social worker during the period February to December 1967 was 27 sessions, each of about three hours' duration. This is only a quarter of the time at first allocated, as the social worker found demands on her time elsewhere prevented her visiting the Health Centre more often.

The two main sources of referrals were from the general practitioner direct when the social worker was on duty at the Centre and from the general practitioners via the sister-in-charge when the social worker was not at the Centre. The sister-in-charge sent telephone messages and held correspondence. Further indirect referrals came from other social work agencies and health visitors. In addition, occasionally the general public made a direct approach, knowing the social worker was in the building.

During the year 18 main cases were dealt with; six men and twelve women. It is interesting to note that these people were mainly in the age range up to 40.

The social worker at the Centre spent a proportion of her time advising the general practitioner of the social work agencies available and making necessary referrals for them. In many respects perhaps she can be considered to be a diagnostician re-referring cases after an initial interview to more appropriate agencies, those being mainly Mental Health, Social Services Department, Disablement Resettlement Officers at the Ministries of Labour and to the Housing Department. In addition long-term case work was undertaken with patients suffering from physical disabilities and handicaps. The social worker helped them to adjust to their new disability and also worked with their families, where necessary helping to lessen the burden that falls upon them by instigating the provision of practical services, for example home nursing, home help, laundry services, meals on wheels—to mention but a few. Another group of people whom the social worker has helped were those

who repeatedly went to their general practitioner with varying psychosomatic symptoms. Both this group and a further group of patients who could be considered socially inadequate have received supportive help and reassurance. Other referrals to the social worker have concerned difficult domestic situations, as for example those created by marital disharmony or sudden bereavement.

Below is a simplified table of the main cases dealt with during the period February to December, 1967.

<i>Sex</i>	<i>Age</i>	<i>Diagnosis or reason for consulting G.P.</i>	<i>Nature of problem presented to S.W.</i>
M	19	Migraine. Anxiety state.	Marital, financial, housing and employment problems in a socially inadequate patient.
F	32	Hypertension. Anxiety state.	Housing transfer.
F	23	Epilepsy.	Non-acceptance of condition. Employment difficulties.
M	40	Anxiety state.	Unemployment.
F	61	Phlebitis.	Rehousing.
M	8	Congenital malformation.	Housing. Aged handicapped. Dependant.
F	20	Illegitimate pregnancy.	Supportive help to family.
F	22	Disseminated sclerosis.	Unmarried mother (re-referred).
M	50	Bronchial asthma.	Non-acceptance of diagnosis. Difficult domestic environment.
Couple	64	Husband double amputee.	Financial problems.
	63	Wife bronchitis.	Marital disharmony.
Couple	47	Husband cerebral haemorrhage resulting in paraplegia.	Marital disharmony.
	41	Wife anxiety state.	
F	12	Hemiplegia.	Need for supportive help to family.
F	30	Spondylitis.	Need for medical aids. Financial problems.
F	50	Cerebral haemorrhage resulting in paraplegia.	Need for rehousing from slum clearance area.
F	42	Anxiety state.	Marital problems needing re-referral to Marriage Guidance and Probation Service.
F	35	Hypertension.	Aged dependant.
F	70	Reactive depression.	Bereavement. Re-referred to Mental Health Dept.
F	30	Diabetes.	Financial problems including H.P. commitments.

There would seem to be a great potential for social work at this Centre, especially as the general practitioners were becoming more aware of the nature and function of the service offered by the social worker, and the way that it differed from that of the health visitor. At the end of the year plans were in hand for the social worker to carry out a research project to measure the need for a social worker in a group practice of this size based on a health centre, and to consider whether the social worker needed some form of specialised training.

BRISTOL CORPORATION OCCUPATIONAL HEALTH SERVICE

J. W. Markham

(Senior Medical Officer, Occupational Health Service)

Introduction

1967 was the third year of the service; certain aspects of the pattern of personal cases seen during the whole period since its inception will be reviewed.

Staff

Miss D. Bateman, Medical Social Worker, left in January on promotion to the teaching staff at the Royal Free Hospital.

The overall establishment was unchanged and Miss Bateman's work was taken over jointly by Miss M. Moncaster and Miss M. Bottoms.

The Senior Medical Officer was also assisted by Dr. A. J. G. Dickens (one session weekly) and Dr. R. E. Midwinter (one session weekly). Dr. C. Pauli (one session weekly) replaced Dr. K. E. Faulkner who, having made a very useful contribution, was required for work in the M. & C.W. Section.

Other Departmental medical officers altogether did approximately eight sessions weekly, carrying out a variety of routine examinations on traditional lines.

People Seen as New Cases (reviewed for the period November 1964—March 1968)

These have been divided into two main categories for purposes of analysis.

The first main category includes routine initial and periodic employment examinations, where the outcome was relatively uncomplicated.

The second category, which will be dealt with at greater length, includes those referred for specific reasons (a) by the employer, (b) by the person him or herself or the person's union, (c) his doctor or (d) those seen in the course of special surveys or during initial examinations of a special sort such as Road Safety Wardens. People in whom a possible abnormality was found during routine examination and who, therefore, required further action by the Occupational Health Section are also included in Group (d) under the heading "Health Screening."

First Category Cases (for numbers see Table 1)

There was a fall in the number of initial employment examinations in 1967 compared with 1966, but the numbers for the year were similar to those for 1965. In each year, the number includes approximately 500 examinations per year for entry to teacher training college, which are only remotely connected with occupational health. The total labour turnover in the Corporation is quite unknown and there was no change in our policy so that it is impossible to assign reasons for the variation.

All examination reports were seen by the Senior Medical Officer in order to encourage uniformity of standards.

Second Category Cases (Tables 1—6)

There was, naturally, an increase in the total numbers of new cases referred during the second and third years compared with the first, as the service became known. This was most marked in the people who came of their own accord, the number of whom more than doubled while the "official" referrals increased only slightly. As these figures only refer to new cases classified under the year of first referral, the total case load including continuation of old cases increased more than the figures imply. Immunisations are not included.

PATTERN OF CASES DEALT WITH BY THE OCCUPATIONAL HEALTH SECTION

TABLE 1

How cases were referred or initiated
(Classified by Years)

Year	<i>"First Category"</i>		<i>New Cases ("Second Category")</i>				<i>Total new cases "Second Category"</i>
	<i>Routine Examinations (mainly on initial employment)</i>	<i>Official</i>	<i>Self Union or "Voluntary"</i>	<i>Own Doctor</i>	<i>Surveys Initial Examinations or Health Screening</i>		
1964 first 2 months ...		7	1	1	11		20
1965	3,474	108	27	2	105		242
1966	4,180	140	57	8	205		410
1967	3,416	121	65	7	310		503
1968 first 3 months ...		34	20	1	43		98
		410	170	19	674		1,273

TABLE 2

Outcome of "Second Category" Cases
(Classified by Years of first referral)

Year	<i>Found new job for health reasons</i>			
	<i>Opinion on fitness for employment</i>	<i>Personal help</i>	<i>Retirement on health grounds</i>	
1964 first 2 months ...	14	7	1	1
1965	98	127	32	17
1966	164	118	55	19
1967	101	119	41	19
1968 first 3 months ...	61	29	7	2
	438	400	136	58

NOTE: While a personal service such as "finding a new job for health reasons" is not also entered in the totals for "personal help" there are some cases where more than one "outcome" occurred. A common example would be retirement on pension combined with some form of personal help. Moreover the combined total of all three columns in Table 2 does not correspond with the total number of "new cases" in Tables 1 and 3, for the additional reason that no "outcome" under these headings is relevant to most of the survey cases.

TABLE 3

November 1964—April 1st, 1968
 How New Cases were Referred (Classified by Departments)
 Not including Routine Employment Examinations
 (Second Category Cases)

<i>Department</i>	<i>"Official" ("Voluntary")</i>	<i>Self or Union</i>	<i>Own Doctor</i>	<i>Surveys, Initial Examinations or Health Screening</i>	<i>Total</i>
Airport	6	1	—	1	8
Baths	7	—	—	—	7
Cemeteries	2	—	—	1	3
Children's	2	2	—	7	11
City Architect's	4	2	—	1	7
City Engineer's	84	15	5	206	310
City Museum and Art Gallery ...	7	3	—	1	11
City Police	1	—	—	125	126
City Treasury	6	5	1	2	14
City Valuers	5	—	1	—	6
Civil Defence	1	—	—	1	2
Education—non-teachers	50	10	2	34	96
Education—teachers	18	12	1	13	44
Entertainments	—	—	—	1	1
Establishment	—	—	—	2	2
Fire Brigade	7	7	—	15	29
Health (General)	47	53	1	37	138
Health (Ambulance)	11	16	—	2	29
Housing	46	6	2	3	57
Libraries	3	1	—	1	5
Lord Mayors	1	—	1	—	2
Port of Bristol	26	7	2	20	55
Printing and Stationery	1	—	—	1	2
Public Relations	—	—	—	1	1
Registrar's	1	—	—	—	1
Town Clerk	5	2	—	1	8
Transport and Cleansing	43	25	2	186	256
Weights and Measures	—	—	—	2	2
Welfare Services	26	3	1	10	40
Totals	410	170	19	674	1,273

TABLE 4

November 1964—April 1st, 1968
 Outcome of New Cases Seen (Classified by Departments)
 Not including Routine Employment Examinations
 (Second Category Cases)

<i>Department</i>	<i>Opinion on fitness</i>	<i>Personal help</i>	<i>Medically unable to continue old job (also see Table 5)</i>
Airport	6	4	1
Baths	3	3	4
Cemeteries	1	2	2
Children's	5	6	2
City Architect's	2	5	3
City Engineer's	50	44	42
City Museum and Art Gallery	7	3	1
City Police	125	1	—
City Treasury	3	11	2
City Valuers	1	5	2
Civil Defence	1	1	1
Education—non-teachers ...	39	54	14
Education—teachers ...	21	26	2
Entertainments	—	1	—
Establishment	1	1	—
Fire Brigade	20	10	1
Health (General)	49	86	16
Health (Ambulance)	10	19	2
Housing	14	20	38
Libraries	2	3	—
Lord Mayor	1	2	—
Port of Bristol	29	21	10
Printing and Stationery ...	—	2	—
Public Relations	1	—	—
Registrar's	—	—	1
Town Clerk's	2	6	1
Transport and Cleansing ...	22	47	39
Weights and Measures ...	—	2	—
Welfare Services	23	15	5
Totals	438	400	189

NOTE: The combined total of all three columns in Table 4 does not correspond with the total number of "new cases" in Tables 1 and 3 because no "outcome" under these headings is relevant to most of the survey cases.

While a personal service such as "finding a new job for health reasons" is not also entered in the totals for "personal help" there are some cases where more than one "outcome" occurred. A common example would be retirement on pension combined with some form of personal help.

TABLE 5

**Further Analysis of Outcome—Those Unable to Continue
in their Jobs for Medical Reasons**

(Classified by Departments)

Departments in whom no cases came to light are omitted

<i>Department</i>	<i>Unable to Continue Old Job for Medical Reasons</i>	<i>Formally Retired on Medical Grounds</i>	<i>Found New Job Inside Corporation</i>	<i>Outside Corporation</i>
Airport	1	—	1	—
Baths	4	4	—	—
Cemeteries	2	2	—	—
Children's	2	—	1	1*
City Architect's	3	3	—	—
City Engineer's	42	33	9	2†
City Museum and Art Gallery	1	—	1	—
City Treasury	2	—	2	—
City Valuers	2	2	—	—
Civil Defence	1	—	1	—
Education (Non-teachers)	14	14	—	1†
Education (Teachers)	2	—	2	—
Fire Brigade	1	—	1	—
Health (General)	16	12	4	—
Health (Ambulance)	2	—	2	—
Housing	38	34	4	2†
Port of Bristol	10	4	6	—
Registrar's	1	1	—	—
Town Clerk	1	1	—	—
Transport and Cleansing	39	24	15	—
Welfare Services	5	2	3	—
Totals	189	136	52‡	6

*Transferred and did not retire formally.

†Retired on superannuation benefits and therefore also shown in second column.

‡It is estimated that about 46 of these new jobs were in the same department and 6 in another department.

TABLE 6

Outcome of "Second Category" Cases

(Classified by mode of referral)

<i>Mode of Referral</i>	<i>Opinion on Fitness for Employment</i>	<i>Personal Help</i>	<i>Retirement on Health Grounds</i>	<i>Found New Job for Health Reasons</i>
Official (410)	206	155	110	40
Self, Union or "Voluntary" (170)	8	136	21	14
Own Doctor (19)	2	13	4	1
Initial Examinations or Health Screening (not including survey cases) (316)	222	96	1	3

The totals are not the same as the number of new cases (which are shown in brackets) because some of the cases had more than one outcome and, therefore, have been entered more than once in the columns.

The definition of "referrals by own doctor" was rather restricted as it only applied to new referrals direct to the doctors of the service. A much higher number were referred by their doctor via their department, and in future years this would probably be a more useful figure to take. Small as the numbers are, the trend is encouraging; it was, of course, routine practice to inform and liaise with their personal doctor concerning consultations initiated in all other ways, excepting negative results in relatively routine examinations.

Outcome of the new cases seen, classified by years, is shown in Table 2. The large figure for "opinion on fitness for employment" in 1966 is accounted for by a large batch of examinations of Road Safety Wardens done by Dr. Dickens.

The term "Personal Help" is a vague one and includes items of service relatively easily carried out such as health screening, and larger ones such as personal support taking several hours of a doctor's time, perhaps including seeing the spouse and in addition assistance by the Medical Social Worker. Rehabilitation after illness and help by arranging the maximum possible financial entitlements were common services in this group. Help with finding new jobs for health reasons is shown separately and is not counted in the totals for "personal help." The figure for 1965 is relatively inflated by a large proportion of health screening cases which were in subsequent years normally delegated to the Assistant M.O.s doing routine examinations, and therefore disappeared in 1966 and 1967 from the S.M.O.s personal record from which the statistics are drawn.

The figures do not indicate the nature of cases, and in 1967 these included some problems involving teachers, usually psychiatric in nature, which formed an important and time-consuming new factor.

The numbers of ill-health retirements increased in 1966 compared with 1965. This is thought to be due to the introduction of team bonus schemes, which sometimes increased the pace of work and drove out some older workers with health problems—without catering for them by providing suitable alternative work or resettlement machinery. This assertion is based largely on the impression gained by the S.M.O. in talking to the individuals concerned at the time of their medical examination.

The rate of finding new jobs for health reasons increased between 1965 and 1966 more than the figures suggest, because resettlement was often delayed at least several months after the date of first referral under which the cases are classified. A few were both retired on pension and helped to find a new job outside the Corporation's service. This resettlement problem is shown more fully in Table 5, where the cases of those who had to stop doing their old jobs for health reasons are summarised by departments. The numbers of those who are forced to change jobs or retire can be likened to the tip of an iceberg, the submerged part of which is made up of people under strain who would benefit from a suitable job alternative.

It would have been useful to show the numbers of those found new jobs inside the Corporation and in a different department as opposed to the original one, but unfortunately exact figures are not available. It was undoubtedly the exception rather than the rule and is estimated at about 6 cases out of the total of 52. This implies scope for increased liaison; yet co-operation when asked for was readily given. The difficulty of the communication problem for the departmental administrator here is caused by the number of departments, some of which are also administratively sub-divided.

Table 3 shows the pattern of referrals of new cases by departments and the numbers must be considered in relation to size of department. For example, the absolute numbers of new cases seen from among teachers was similar to that from the Ambulance Service. Yet comparing the rate of referral taking into account the total number of employees in each the ratio was about 1 : 20. This difference was even more marked in relation to voluntary referrals (1 : 27).

The figures (11 official and 16 voluntary) for the Ambulance Section which has 124 employees, are a useful reference point, because they may serve as some index for the potential real demand throughout the Corporation; with the reservation that these men have the stresses of round-the-clock shifts, short meal breaks liable to interruption, and pay which is not over-generous, yet they need physical and mental fitness and the retiring age is 65. The service is nearby and therefore readily used by the Ambulance Section, the members of which are personally acquainted to some degree with the staff perhaps largely due to first aid teaching. Unnecessary or trivial problems have never been brought up by them. There are in addition cases which have been dealt with by the Medical Social Worker which have not been included.

The ratio of "voluntary" to "official" cases (Table 3) varied a good deal between departments. To take three largely "manual" departments, each operating and introducing bonus schemes: the ratio of "voluntary" cases was especially low in the Housing Department, where retirement as a result of official referral was very common and new jobs were seldom found; the City Engineer's was intermediate; while voluntary (and early) referral was common in the Transport and Cleansing Department which had an excellent resettlement rate for a largely "manual" department. Which was cause, and which was effect, is a matter for speculation, but the implications for future success of the Occupational Health Service are clear.

Table 6 shows the outcome classified by the mode of referral. The figures indicate that "official" referrals are more fruitful in obtaining personal help for an employee than might be supposed. The ratio of retirements to those found new jobs is higher in the case of official referrals than in voluntary referrals. It is conjectured that this may be due to consultation occurring at a stage before final breakdown is reached, in the case of voluntary referrals, and that constructive action is then more likely to be successful.

FIRST AID (1967)

The groups to be taught were selected to be as uniform in interests and mental make up as was possible, and teaching was designed accordingly. The appropriate examinations were taken. As in previous years the teaching was done by the Senior Medical Officer, who was during the year appointed Somerset County Medical Officer for the Red Cross and a Committee member of Bristol St. John Ambulance Association. He was ably assisted by lay instructors and in particular by Mr. F. Pope and the late Mr. E. C. Bartlett, whose loss is greatly felt.

Advice Concerning Equipment, etc.

City Swimming Baths new resuscitation equipment.

New Avonmouth sewage works first aid room and equipment.

Passenger motor coaches—first aid kits.

Refuse vehicles—first aid kits.

Four Primary Courses (each of 8—10 2-hour sessions)

- (1) City swimming baths attendants (50 attended).
- (2) Corporation non-clerical workers (mixed departments) (15 attended).
- (3) Civil Defence volunteers (40 attended).
- (4) Bristol Red Cross, mainly industrial first aiders (65 attended).

Three Higher First Aid Courses

- (1) Trainee (Junior) firemen (12 attended).
- (2) Ambulance drivers (10 attended).
- (3) St. John's volunteers Central Health Clinic detachment (20 attended).

Special First Aid Teaching for Particular Circumstances

School kitchen supervisors (several groups).

District Nurses (several groups).

Health Visitors (several groups).

Lay Instructors' Course

Medical supervision of the Bristol St. John Ambulance Association's annual course (30 attended).

" Occupational First Aid " Course

Bristol Red Cross (15 attended).

First Aid Competitions (judging and setting)

Port of Bristol Authority.

Red Cross (Somerset) County Round.

Red Cross (Wiltshire) County Round.

South Western Electricity Board.

FORMAL TEACHING (Occupational Health)

The S.M.O. was appointed lecturer in Occupational Health at the University of Bristol. Medical Students (several groups), School staff nurses (teachers' health), Welfare Assistants.

HEALTH EDUCATION

Interviews on regional TV and radio concerning the effects of noise on the worker.

Collaboration with "Bristol Evening Post" journalists leading to two feature articles concerning occupational health topics. A further press article described how to avoid chlorine poisoning from w.c. cleansers.

A talk to Bristol Trades Council on "Occupational Health in a Local Authority."

Presentation of the paper "An Occupational Health Service in a Transport and Cleansing Department" at the annual conference of the Institute of Public Cleansing at Blackpool. This paper, with the subsequent discussion, was reported on in the journal "Public Cleansing," September, 1967, Vol. 57, No. 9, pp. 479-489 and p. 496; October, 1967, Vol. 57, No. 10, pp. 535-538.

PREVENTIVE WORK IN INDIVIDUAL CORPORATION DEPARTMENTS (some aspects)

City Engineer's

Advice was given concerning medical aspects of the new Code of Practice to be published shortly by the Ministry of Housing and Local Government in connection

with work in sewers. This was done in collaboration with Mr. G. T. H. Bennett, the Senior District Engineer of Bristol, who is a member of the National Committee set up by the Ministry for this purpose. The subjects covered were: medical standards in selection of workers, immunisations, Weil's Disease prevention, first aid, hand-care, and rescue methods.

Analysis of causes of premature retirement on grounds of ill-health

City Engineer's and Transport and Cleansing Departments—January 1955—December 1964

It was desired to discover whether there was any preponderant type of chronic illness in either department, and in particular to see whether chronic lung disease was especially common in the Transport and Cleansing Department following a request from the Transport and Cleansing Committee to investigate that problem. Therefore, the medical records concerning retirement on grounds of ill-health were analysed.

In order that benefits can be paid under the superannuation scheme premature retirement on health grounds has to be recommended in each individual case by a medical referee (on behalf of the Medical Officer of Health). This tends to exclude from such a procedure those whose service is too short (less than five years) to qualify for benefit.

The records of the medical examinations of each person who had retired in this way from these two departments were scrutinised independently by three doctors; they selected from a list the main category of medical condition which in their opinion had chiefly necessitated retirement (see Table 7). The first two doctors (D.J.S. and J.W.M.) each coded half the ten-year period in this way. The third (R.E.M.) coded the whole ten-year period.

There were, sometimes, differing opinions as to which of two co-existing illnesses was the most important. The numbers in each corresponding medical category were therefore averaged and expressed as percentages of the total prematurely retired from each department (see Table 8).

The numbers of retirements may not be quite complete because their discovery meant going through all the existing medical records for ten years. There may have been omissions during this laborious process.

However, there seemed to be no likelihood of one type of case being missed rather than another or of one department or medical examiner being selected.

TABLE 7

Main Medical Causes of Premature Retirement 1955—1964

	Coding Doctors D.J.S. and J.W.M.		Coding Doctor R.E.M.	
	Transport & Cleansing	City Engineers	Transport & Cleansing	City Engineers
Diseases of Respiratory System (except Tuberculosis)	21	26	17	22
Diseases of Circulatory System				
Arteriosclerotic and Coronary	3	10	6	11
Hypertensive	2	13	3	14
Other	3	4	4	2
Pulmonary Tuberculosis	0	3	0	3
Neoplasm	5	4	5	7
Psychological Illness	1	3	1	6
Diseases of Nervous System	2	9	2	8
Diseases of Digestive System	3	4	4	3
Diseases of Genito-Urinary System	2	0	1	0
Diseases of Skin	0	1	0	1
Diseases of Bones and Organs of Movement	4	4	4	5
Other	2	5	1	4
Total	48	86	48	86

TABLE 8

Summary of Main Medical Causes of Premature Retirement 1955—1964

	Transport & Cleansing Department		City Engineers	
	Average number from Table 7	%	Average number from Table 7	%
Diseases of the Respiratory System (except Tuberculosis)	19	40	24	28
Diseases of the Circulatory System				
Arteriosclerotic and Coronary	4.5	9.5	10.5	12.2
Hypertensive	2.5	5.2	13.5	15.7
Other	3.5	7.3	3	3.5
Total (Diseases of the Circulatory System)	10.5	22	27	31.4
All Other Causes	18.5	38	35	40.6
Totals	48	100	86	100

Only 7 of the 86 employees who retired from the City Engineer's department and one of the 48 from Transport and Cleansing were classed as "clerical, technical or administrative" workers and among these hypertension was not an especially common main cause of retirement. There was only one female employee in the two groups. The "other causes" were, apart from circulatory or respiratory disorders, fairly evenly distributed.

While the numbers concerned are not large enough to draw firm conclusions as the apparent difference could be due to chance, there is some evidence to suggest that chronic respiratory disorders were especially common among those who retired

from the Transport and Cleansing Department while hypertension was a fairly prominent feature among the City Engineer's group. It is suggested that more figures should be collected in order to confirm or disprove these impressions, and full occupational histories might reveal some relevant factors.

Survey of aspects of lung function in the existing labour force

With Drs. R. E. Midwinter and A. J. G. Dickens, and voluntary work by medical students Mr. P. Brown and Miss A. Eastman, measurements of certain aspects of lung function were carried out in refuse collectors by means of a Vitalograph spirometer and the M.R.C. respiratory questionnaire on respiratory symptoms (1966). The entire available labour force was asked to collaborate and to have these tests done in their own time, without payment, between 6 a.m. and 7.30 a.m. in small groups of between 3 and 20 per day. The whole procedure took about 20 working days.

Of the 173 refuse collectors, 167 volunteered, i.e. 96.5 per cent; a response which does credit to the management, the unions, the students and the men themselves. The six men who did not want to have the tests done did not appear to have any uniform health or age characteristics.

For purposes of comparison, sewermen who were due to have routine immunisations were asked, after arrival, to submit to the same tests, which were administered by the same group of people at the same season of the year (late summer). All sewermen are normally offered these immunisations, and the group is therefore an unselected one, apart from any unintentional selection for this occupation or for those who avoid the immunisations. The assistance of Mr. G. T. H. Bennett, Senior District Engineer, and his staff was invaluable.

The results will be published separately. It would be desirable to carry out other types of investigation and in particular carbon monoxide diffusion tests.

Mobile dust-sampler

The Department of Occupational Hygiene at Manchester University loaned this machine, which was worn by a refuse collector for a full working day. This showed that its use on a regular basis, in order to sample the dust in the air being breathed by the men, is practicable. Such a procedure would enable comparisons of the size, nature and numbers of particles to be made while using differing methods of collection (as is the situation in the City at present). Co-ordination of such sampling with lung function tests, possibly with the assistance of the Standing Committee of Research on methods of Refuse Collection of the Ministry of Housing and Local Government, would be of interest.

Education Department

During 1967 a meeting was held between the schools inspectorate and the Senior Medical Officers (School Health and Occupational Health) with Dr. Duffey, the Chief Schools Inspector, acting as Chairman. As a result it was agreed that machinery should be set up, to make available informal medical consultation with the Senior Medical Officer (Occupational Health) by teachers, in relation to their work, and in liaison with their own doctors. This was to operate independently of the employers' medical supervisory service designed primarily to protect the pupil and working through the Senior Medical Officer (School Health), because it would be entirely confidential if necessary; though there would often be occasions when the two sections would liaise with advantage (given the teacher's willing agreement).

This was begun, and is considered workable and worthwhile, given sufficient medical staff of the right type. An opportunity exists here for the prevention of mental illness in a key group (Bristol has about 3,000 full-time teachers). There is, perhaps, a degree of analogy with student health services, among which Ryle's in Sussex (Ryle 1968)* requires all its doctors to undertake psychotherapy up to some level; they are backed by a part-time consultant psychiatrist.

*Ryle A. *Trans. Soc. Occup. Med.* (1968), 18, 28-29.

City Treasury

Mr. Rendell of the Motor Taxation Section requested advice concerning the decoration, lighting and layout of his section's new office accommodation. Investigations were done in association with Dr. Dickens and with the advice of Mr. K. F. H. Murrell, Reader in Ergonomics at Cardiff University. As a result, some of the previous office furniture arrangements, which had been responsible for back pain in some cases, were changed. In one of these cases, the back pain was severe and intractable and cleared up after the change of office furniture.

Other Office Departments

It was concluded as a result of this experience and further investigations that many, if not most, office departments have a good deal of unsuitable furniture. Perhaps some was designed for male clerks using pens rather than for girls and women using office machinery. It was often observed that a girl of average height is forced to sit about four inches too high with resulting bad posture and fatigue and yet will accept this as a normal working environment. Worse, an under-table drawer often aggravates this distorted position. A survey might well also show a high incidence of unscheduled rest pauses but the Occupational Health staff is not at present adequate to follow this up; in any case this aspect is in the field of work study. Information concerning the correct measurements and design of office furniture* was given to those officers responsible for buying it in some departments, but this should be more widely done, perhaps by an article published in "Public Service." This would also have the advantage of influencing those employees who find changes of this sort difficult to accept.

*Mead, Dorothy, "The Odd Ergonomic Inch and Why it Matters in the Office," "Design" (April 1966), Vol. 208, 38-44.

Port of Bristol

Mr. Barnett, a Senior Public Health Inspector, measured the noise levels to which the drivers of certain fork-lift trucks were exposed. These revealed a potential hazard to hearing. Methods of reducing this noise are being sought in association with Dr. G. Febry, the Senior Medical Officer (Port Health).

Safety Officer's Liaison Committee

In consultation with other departments plans were made to set up a liaison committee in order to co-ordinate efforts for the promotion of safe working practices and conditions throughout the Corporation, and to use available resources and knowledge with the maximum effectiveness.

General work pattern of the S.M.O. in 1967

The S.M.O. divided his time in 1967 approximately as follows: 50 per cent dealing with employees' personal problems; 25 per cent on teaching, or meetings; 10 per cent investigating job circumstances; and 15 per cent to miscellaneous jobs such as Civil Defence, report writing, administrative planning and investigations (e.g. refuse collectors' lung function, multiple presymptomatic screening for employees, etc.).

It became clear that if all tasks are to be carried out, an additional doctor will be needed now that the demand has developed. The part-time clerk's post should be replaced by a full-time typist's post. Alternatively some of the functions of a full preventive occupational health service will have to be removed or reduced.

At first sight the obvious item to cut would be teaching and meetings. However, this is considered a vital part of this service which has virtually no "treatment element"; in a diffused organisation with 17,000 employees it is the most economical way to make contact with, and become known to, all levels in the organisation to be served.

Remarks on Finances and the Future

The primary aim of this service has been and must be to benefit the employees; yet in a time of relative shortage of medical staff and of money it would be useful to investigate whether any money value can be assigned to the end-product.

Such a calculation is very difficult especially in view of the lack of personnel statistics. High labour turnover, bad morale and excessive sickness absence are all expensive, but the effect of the Occupational Health Service on these (where they exist) cannot at present be known. Efficient rehabilitation back to work after illness also saves money but the amount cannot yet be measured.

The number of people found new jobs (assuming that this is work that they can do effectively) when they cannot continue their old jobs for medical reasons, is a service to which some very approximate money value can be given. If each such case had a value of, say, £200 per annum this would have saved in 52 cases the equivalent of £10,400 per annum excluding those found new jobs outside the Corporation. The value given could, of course, be disagreed with in either direction.

There is no doubt that the total number of resettlements would be greatly increased if there were a central Personnel Department with which to liaise, though it would not be necessary for the Occupational Health Service to be administratively combined with such a Department for this to be done efficiently.

ENVIRONMENTAL HEALTH SERVICES

G. J. Creech, M.B.E., C.St.J., F.R.S.H., M.A.P.H.I.

(Chief Public Health Inspector)

REPORT TO THE MEDICAL OFFICER OF HEALTH

I have pleasure in submitting my fourth annual report upon the work of the Environmental Health Services Division—that for the year 1967.

Before I became Chief Inspector there had been a steady expansion in our work as shown by the overall total of visits recorded in previous years. This expansion has been maintained over the last four years to a record total of visits for 1967 of 116,851, as shown below.

1964	81,634	+7,528
1965	102,393	+20,759
1966	108,053	+5,660
1967	116,851	+8,798

This increased work output has been due to the introduction of technical assistants to whom I referred in my last report. As they were appointed during 1966 this present report is the first to reflect the result of a full year's work in this new approach. We have benefited greatly by their ability to relieve public health inspectors of time-consuming routine enquiries thereby enabling the inspectors to pay more attention to those matters, such as food hygiene work, requiring their more professional training and experience.

In October an old colleague and former Senior Food and Drugs Inspector, Mr. H. M. Gould, who retired some seventeen years ago after over forty years' service with the Department, died suddenly at the age of eighty-two.

Mr. A. L. Mawditt (Specialist Inspector (Meat)), was honoured during the year by being made a Fellow of the Royal Society of Health. Mr. Mawditt has for some years been an examiner for the Society's Certificate in Food Inspection.

I had the honour to present a paper to the Annual Conference of the Association of Public Health Inspectors on the "Health and Welfare of Workers in Offices and Shops."

I wish to place on record my sincere appreciation of the loyalty and help of the staff, particularly during my recent illness.

GENERAL ENVIRONMENT HEALTH WORK

SUBMISSION OF PLANS

722 plans have been submitted by the City Engineer and Planning Officer for perusal by the specialist officers and district inspectors. The value of this liaison with the City Engineer has again been amply demonstrated particularly in relation to air pollution, noise and Offices, Shops and Railway Premises legislation. The amount of work involved in checking plans is often considerable but well worth while. The figure of 722 represents an increase of 73 over 1966.

WATER SUPPLY

The water supply of the City, which is within the area supplied by the Bristol Waterworks Company, has been found completely satisfactory in both quality and quantity.

Contamination after treatment has been found negligible but should any trace of faecal contamination be found in supply the matter is taken up with the company and frequent repeat samples are taken until satisfactory results are obtained.

The whole of the population in the City is supplied by water mains direct to houses and there are no standpipes. The fluoride content of the water supplied within the Bristol area varies with the Company's sources of supply and these are as follows :

Barrow	0·04–0·20 p.p.m.
Chelvey	0·05–0·12 p.p.m.
Stowey	0·08–0·38 p.p.m.
Littleton	0·05–0·15 p.p.m.

SEWERAGE AND SEWAGE DISPOSAL

Work was continued on the construction of the new trunk sewer system designed to intercept discharges of sewage into the river Avon and to divert sewage flow to the treatment works at Avonmouth. The Ashton Avenue pumping station to serve south Bristol was commenced. During the year sewage from 270,000 or about half of the population has been treated at the new sewage works, in addition to the sewage from the adjacent urban and rural district areas of Mangotsfield, Sodbury and part of Thornbury. The final residue, digested sludge, will be disposed of at sea and a tanker ship is under construction for the purpose. There has been a further small reduction in the number of premises within the City not drained to sewers. The total number of premises discharging to septic tanks or cesspits is now 330.

HOSTELS (Common Lodging Houses)

The three hostels run by the Salvation Army (2) and the Church Army have been found completely satisfactory. The officers in charge have again been most helpful in permitting visits of students for practical demonstration purposes and my thanks are due to them.

THE PET ANIMALS ACT, 1951

Prior to the issue or renewal of licences all pet shops in the City are inspected by the Corporation's Veterinary Officer and the Deputy Chief Public Health Inspector. Subsequent routine inspections are made by the district inspectors during the year. A total of 84 inspections have been made during the year of 28 licensed premises.

THE ANIMAL BOARDING ESTABLISHMENTS ACT, 1963

Four licences were renewed after inspection by the Veterinary Officer.

THE RIDING ESTABLISHMENTS ACT, 1964

There are two riding establishments in the City and both were inspected by the Veterinary Officer.

FROM THE DEPARTMENT'S RECORDS

A Most Unusual Occurrence

During most years almost every public health department will be faced with an unusual occurrence, problem or situation and occasionally, as such, it will make the headlines of the local, and sometimes the national press or even radio or television programmes. In March of this year we were involved in an event which achieved publicity in all four fields.

The occasion, Bristol University "Rag Week" and an all-night pedal car race, on a section of the old airfield runway at Whitchurch. About 500 persons who were present were affected by burns to the face and in some cases to the eyes. Hospital casualty departments were inundated early the next morning.

At first it was reported that chemical treatment of nearby grassland was the cause and that victims were suffering from ammonia burns; a little later banner headlines in the local press suggested the possibility of radiation burns, but as no persons or objects from outer space had been observed, most people were at a loss to understand how radiation burns could have occurred. One helpful informant, however, claimed he had seen, on the night in question, clouds of radio-active material passing over the City in the general direction of Whitchurch! Many other people also telephoned the office proffering information.

Representatives of the Police and the Medical Officer of Health, the Public Analyst and the Area Public Health Inspector visited the site to inspect and discuss the situation and samples were taken for examination.

When the Analyst had completed his investigation the theories were all demolished and a comparatively simple explanation was found for what was, nevertheless, a rather frightening experience.

The exposed skin and eyes of persons on and around the western end of the track had been contaminated by fine dust raised from gravel chippings laid two years previously. The dust contained a considerable quantity of tar, and some free tarry acids (phenols) were present. These are known to sensitise human skin to ultra-violet radiation. Arc welding equipment, which is a powerful source of ultra-violet, had been in use for a considerable part of the night in the centre of the race track, and had been inadequately shielded. In addition, the morning had been particularly sunny.

The liberal exposure to ultra-violet light which had occurred was thus thought to have caused the burns; the effect was probably accentuated by the tar which had contaminated the skin of many competitors. A few individuals were reported as suffering from corneal abrasions—these could have been caused by particles of grit and tar blowing into their eyes.

Eventually the Rag Committee were advised of precautions that should be taken in the future to avoid a recurrence. These included suitable shielding of welding apparatus, and the provision of washing facilities and goggles for the use of competitors.

Insect Pests

Occasionally one meets with worrying cases of insect infestation on new council developments particularly where centrally heated multi-storey flats are concerned. Naturally, every effort is made to prevent verminous or infested articles gaining access to council accommodation but if an infestation does occur the existence of

central heating and its associated pipe ducts aid the spread of an infestation through the building.

One case we were requested to deal with concerned an infestation by the brown banded cockroach *Supella Supellectilium*. This unusual species of cockroach brought joy to the department of entomology of Bristol University and the City Scientific Adviser was also delighted to obtain several good specimens. How the insect arrived in the flat could not be established but it was suspected that it had been introduced by the previous tenant who was a frequent visitor to the continent.

Another form of infestation occurred in the same block of flats. This time the infestor was a parasitic mite *Dermanyssus Gallinae*. These blood-sucking parasites are found on different species of birds; they will also bite man causing discomfort but no real harm. This infestation may have come from birds or an abandoned nest near to the flat; it was quickly eradicated.

NOISE

The opinion that noise is one of the modern environmental evils has been expressed many times, not only by early research workers dealing with the physics of noise generation and control, but also by the Wilson Committee, and now by most of the general public. This opinion is borne out by the knowledge that people today are more conscious of noise and are not prepared to tolerate noise levels which cause them annoyance, disturbance, or nuisance. Comparing pre-war statistics for Bristol with those for 1967, a rise in noise complaints from negligible numbers to 143 initial complaints has been recorded, together with 1,799 visits by public health inspectors. Even allowing half an hour per visit the impact of noise on the Environmental Services Division is obvious, especially when one considers that many noise observations are, of necessity, taken during the late night or early mornings, making it necessary for the officers concerned to receive compensatory leave in lieu of this work.

Two important publications on the subject of noise have appeared in 1967, and these are, Circular 22/67 entitled "Industrial Noise," and British Standard 4142, dealing with the "Method of Rating Industrial Noise Affecting Mixed Residential and Industrial Areas."

Part of the Circular deals with the very important aspect of staff training, and recognises that the physics of noise measurement and control are extremely complex and that without a sound knowledge of this subject a local authority will not be able to administer the provisions of the Noise Abatement Act successfully. The Circular recommends that public health inspectors should receive specialised training on noise control and it is pleasing to report that the Health Committee took early action in this respect, and to date three of our senior staff have attended the residential course on noise at the University of Southampton. It is hoped that all the district inspectors, whose duties involve them in noise measurement and observation, will eventually receive this specialised instruction, and the action of the Bristol Technical College concerning a future noise course is welcomed.

The British Standard 4142 follows closely the suggestions set out in the Wilson Report, and in the absence of Performance Standards in this country provides at least a uniform method of assessing noise from industrial premises. The standard has been adopted in the department when assessing noise complaints, and it is

significant that reports received from noise consultants are increasingly using this standard as their method of presentation.

The accurate measurement of noise pressure levels is an obvious requirement in any noise investigation, as the possibility of legal action in the event of failure of an informal approach can never be overlooked. The instruments available in the department in the form of noise level meters and calibration equipment, will permit spectrum analyses to be made to octave band level. If, as is likely in the fairly near future, international agreement is reached on methods of noise rating, instruments with only limited measuring facilities may well become obsolete.

An interesting case under the Noise Abatement Act was taken by the department during the year in the Bristol Magistrates' Court, and concerned a nuisance caused to the occupiers of a house by amplified music produced in an adjoining public house. The question of whether the matter should be taken into court received a great deal of thought, particularly as only one household was affected, and the brewery had, at the insistence of the department, carried out acoustic treatment to the party wall at a cost of £380. However, the sheer volume of amplified music was too much for the insulation provided and was still giving sound pressure levels of up to 50 decibels ("A" Weighting) inside the house late at night and as it was felt that despite these works the best practicable means, i.e. the reduction of the volume, had not been taken, the case was brought before the court. Three witnesses were called for the local authority, two inspectors and the complainant. The defence sought to show that:

- (1) The noise was not very great if one compared the 40–50dBA recorded with the 70 dBA of "ordinary conversation" (the defence description).
- (2) That the best method had been used for sound-proofing the party wall and that any additional reduction could only be achieved at prohibitive cost, even if it were practicable.
- (3) That the public house was serving an obvious local demand and that the form of entertainment was necessary to meet the changing tastes of the public, a change which had, in fact, been recognised in the Licensing Act of 1961.

The defending solicitor called five witnesses, the Licensee, the Chief Architect to the brewery, an acoustic engineer, the brewery area manager and a policeman. He finally submitted that no nuisance existed, and even if it did then the best practical means had been taken to keep it at a reasonable level. The Magistrates retired for about fifteen minutes and returned to say that they refused the application and dismissed the case. Incidentally, one of the first questions asked of the inspector was the date when the noise level meter was last calibrated; we were able to say that the meter was calibrated before measurements were made.

Some examples of noise attenuation achieved by the action of the Environmental Services Division are given below:

<i>Site</i>	<i>Improvements Achieved</i>
Marsh Street Development	Adjustment of pile-driving programme to reduce noise nuisance in adjacent office buildings. Use of muffled pneumatic drills.
Marsh Street Office Development	Ditto.
Telephone Avenue, demolition of concrete air-raid shelter	Alteration of timing of demolition works to weekends only to avoid noise nuisance to adjoining office workers. Use of silenced equipment.

South Western Gas Board roadworks, City Centre	Use of silenced pneumatic rammer.
Bristol School Premises	Construction and use of absorption and deflection chamber to cooling fan ducts serving digital computer.
A Local Supermarket	Provision and use of a mineral wool attenuation unit to air intake ducts to cooling system.
An Ice Rink	Provision and use of fibreglass baffles to reduce noise from air movement through the condenser of the refrigeration plant.
College of Advanced Technology, Ashlev Down	Silencing of an experimental 120 h.p. diesel engine.
Bristol Royal Infirmary	Noise survey in conjunction with Southampton University, with recommendation for double glazing.
Central Health Clinic	Noise survey with recommendation and subsequent provision of double glazing to certain offices with high traffic noise level nuisance.
A Public House licensed for music and dancing	Provision of insulation to party wall between public house and private dwelling.
A large printing firm	Noise survey followed by provision of double glazing to whole of end wall of factory with sound locked doors and additional ventilation. Provision of sound absorption on internal upper walls of the factory.
A Wholesale Fish Depot	Alteration in management control to reduce noise from late night operations.
Dairy Premises	Provision of plastic milk crates in lieu of metal.
General Road Works	Provision of silenced road drills by various statutory undertakers and large engineering contractors working in the City.

HEALTH EDUCATION AND TECHNICAL TRAINING

The list of lectures and demonstrations appended shows that the department has been very active in providing a service to the community and where visits and/or demonstrations of a practical nature have been provided there have been many expressions of appreciation. The specialist, area, and district inspectors have all been involved at various times and their willing co-operation is greatly appreciated.

PRACTICAL TRAINING OF STUDENTS

We started the year with eight pupil public health inspectors. One student sat for and passed his final examination and three new pupils were appointed in September leaving a total of ten students at the end of the year.

In September the Bristol Technical College Course converted its training schedule from a four-year block release course to a three-year sandwich course. The intake of three new students per year will thus result in the production of twelve qualified inspectors in every four years, a further contribution by Bristol to the remedying of the national shortage of qualified public health inspectors which remains at approximately 600. The proposed establishment of the Local Government Training Board scheme and the provision of training grants should help to relieve local authorities who offer adequate training facilities of some of the burden of the cost of training inspectors and it is hoped that the offer of grants will encourage local authorities who are not as yet employing students to do so and thus participate in the benefits accruing from the levy.

As mentioned in previous annual reports, Corporation establishments and various business managements have co-operated fully with the department to pro-

vide practical training for all types of students from many parts of the world. We extend to all concerned our acknowledgments and thanks.

FILMS, SLIDES AND PHOTOGRAPHS

The library has been further extended during the year and again photographs and coloured slides have been loaned to colleagues for lecture purposes. Slides and negative photographs have been secured of areas of housing now rapidly disappearing as new development and road programmes are extended.

LECTURES AND/OR DEMONSTRATIONS

<i>University of Bristol</i> (<i>Department of Public Health</i>)	Diploma in Public Health Health Visitors' Certificate Course Clinical (Medical) Course
(<i>Department of Veterinary Medicine</i>)	Veterinary Public Health Course
(<i>Faculty of Science</i>)	Domestic Science Students
(<i>Students' Union</i>)	Student Animal Welfare Society
(<i>Extra Mural Department</i>)	Public Health Inspectors Refresher Course
<i>Ministry of Labour</i> (<i>Labour Administration Course</i>)	Overseas Labour Officers
<i>Bristol Technical College</i>	Diploma Course for Public Health Inspectors Institutional Management Association Course Domestic Science Students Catering Students Clinic Assistants Student District Nurses Trainee Medical Practitioners Royal College of Midwives—Refresher Course Social and Welfare Workers Health Visitors' Training Course
<i>Department of Public Health</i>	National Trade Development Association Licensed House Training Course Student Nurses
<i>College of Commerce</i>	
<i>North Gloucestershire Technical College</i>	
<i>The Central Institute</i>	
<i>United Bristol Hospitals</i> }	
<i>Frenchay General Hospital</i> }	
<i>Stoke Park Hospital</i> }	
<i>Purdown Hospital</i> }	
<i>United Bristol Hospitals</i> }	Catering and Nursing Staffs (food hygiene)

- The following schools were visited:
- Redland High School for Girls
 - Speedwell Secondary Modern School
 - Hartcliffe Comprehensive School
 - Ashton Park School
 - Hengrove Comprehensive School
 - Colston's Girls' School
 - Pen Park Senior Girls' School
 - Lawrence Weston School
 - Monks Park School

Talks were also given for:

Bristol East Young Conservatives
Bristol West Young Conservatives
Bristol Master Butchers' Association
Bristol Trades Council
C.W.S. Bakery Division Welfare Officers
C.R.S. Grocery Trainee Managers
C.R.S. Junior Entrants
Henbury Townswomen's Guild
Ashton Vale Young People's Club
East Bristol Baptist Women's League
St. Edmund's (Bishopston) Women's Fellowship
Harrowdene (Knowle) Young Wives
Civil Defence, Post Office South West Region

Students visiting the department for training for varying periods have come from Holland, Ceylon, India, Hong Kong, Nigeria, Kenya.

HOUSING

FUTURE ATTITUDES

"The object of this Bill is to provide a domestic condition for the people in which their physical health, their morals, their characters and their whole social conditions can be improved by what we hope to secure in this Bill. The Bill aims in broad outline at, and hopes to secure, the house beautiful, the town pleasant, the city dignified and the suburb salubrious. It seeks and hopes to secure more homes, better homes, prettier streets, so that the character of a great people, in towns and cities and in villages, can be still further improved and strengthened by the conditions under which they live. . . . On its housing side the Bill seeks to abolish, reconstruct and prevent the slum."

These words were spoken by Mr. John Burns when he introduced the Housing and Town Planning Bill to Parliament in 1909.

Since that time a great deal has been achieved and even when we have regard to the great social, medical, economic and technological changes which have taken place in our way of life and the changing concept in the meaning of health—the basic truths still apply.

Against this background of change, and the growing emphasis which is being placed on environment both inside and outside the home, with our sensitivity to noise and vibration and to atmospheric pollution, can we continue to speak of slum clearance in isolation?

True, houses still exist which are so bad as to be rightly described as slums, but in the main the problem before local authorities today is how best to deal with unfit, or substandard houses so as to reap the maximum advantage to the community at large.

Slum clearance is not a problem in isolation any longer—it is but part of the greater problem of comprehensive and coherent planning demanding the thought and energies of all corporation departments.

Decisions will have to be taken as to how best to deal with areas rather than streets. The increase in the number of owner/occupiers and the liberal attitudes of

local authorities to mortgages and improvement grants suggests that the time to make those decisions is now.

HOUSING AND ENVIRONMENT

Two fairly recent publications—The Parker Morris report—“Homes for today and tomorrow” and The Denington Report—“Our older homes—a call for action”—whilst dealing with widely different aspects of housing—the new and the old—have two things in common—they speak of homes and they speak of environment.

No doubt the use of the term “homes” in both reports was accidental—but it is a good one to use for it seems to bring us more closely to “people,” and it is really people and their environment both within the home and outside it which call for attention.

There are many indications that the Minister of Housing and Local Government thinks this way, for Circular 53/64—referring to the improvement of houses—suggests that local authorities should consider the question of environment, emphasising new street furniture, tree planting, more parking facilities and better open spaces.

A recent survey and exercise in Bristol in which many departments co-operated is of some interest.

The area concerned comprised some 1,500 houses of which a group of 50 are likely to be demolished as unfit or not worthy of improvement. The balance was divided into three groups and action under the Housing Act, 1964, has been commenced to secure the improvement of the houses, group by group. The main area amenities which are sadly lacking are lock-up garages, off-street parking, play spaces for children, rest areas for the elderly and public conveniences.

It was decided, mainly because of car parking difficulties and the desirability of looking at this factor in conjunction with the works of improvement to the houses to carry out an exercise, and where possible the area amenities have been sited to replace the poorer class of improveable house.

Off-street parking was provided to some extent by the provision or widening of rear access ways, and this would at the same time do away with the narrow and often ill-kept back lanes. In addition lock-up garages were catered for, and it was recommended that traffic control should be considered for other than main through roads.

A number of play areas were so sited that in the majority of cases the smaller children could reach at least one of them without crossing busy main roads. Coupled with the play areas were rest areas for parents to keep watch over their children, and the elderly to sit amidst trees, shrubs and flowers.

Public conveniences were sited in the rest areas at suitable points.

Expressed statistically

Total number of existing properties excluding those to be demolished as unfit, etc.	...	...	...	...	...	1433
Proposed new properties on site to be developed	...	...	...	...	56	
Proposed demolitions for garages, play areas, etc.	...	...	...	...	127	
Total number of properties resulting from scheme	...	...	...	...	1362	
Properties with existing car space or garage	...	...	...	...	287	
Additional off-street parking resulting from rear access ways	...	...	...	...	412	
Proposed lock-up garages	...	...	...	...	410	
Total number of car spaces or lock-up garages resulting from the scheme	...	...	...	...	1109	

To analyse this still further it means that 127 improveable houses (or 9 per cent of the whole) would have to be demolished to provide the amenity features desired and to increase car parking facilities, yet 253 houses would still be without this facility.

ENQUIRIES AS TO "FUTURE LIFE "

Some years ago the Ministry of Housing and Local Government requested local authorities to be as helpful as possible to prospective purchasers of property who requested guidance on the "life" of the house in which they were interested from both the slum clearance and planning angles.

Bristol has provided this service, the Town Clerk co-ordinating the information supplied by the Health, Housing and Planning Departments and enquiries received were of the order of 1,600 a year.

In April, 1967, as a result of discussions between the Law Society and the Association of Municipal Corporations, the official search document was amended to include the following compulsory question:

"Is the property situated in a locality which may make it the subject of action under Part III of the Housing Act, 1957?"

The change in procedure has resulted in a jump in enquiries from the average of 1,600 a year to 5,000, and of these, some 23 per cent are in respect of new houses, void sites or properties other than houses.

NATIONAL HOUSE CONDITION SURVEY

The report of the Denington Committee on housing standards laid great stress on the absence of reliable information respecting the size of the slum problem in England and Wales. Until 1967 the Government had relied on information supplied by the local authorities and which was known to be based on rough estimates only.

Early in 1967 the Government itself carried out a sample survey, referred to as the National House Condition Survey, and for this purpose seconded to the Ministry twenty-six public health inspectors for a period of six weeks.

It is satisfying to note that one Bristol inspector was chosen for this work and during the six weeks period he travelled to London, Portsmouth, Swansea and district, Truro, St. Austell, Exeter, Newton Abbot and Honiton covering local authorities of all kinds.

In addition, Bristol itself was chosen for survey purposes and a member of the staff acted as a guide to the visiting inspector.

STANDARD GRANTS AND UNFITNESS

It is a condition of a standard grant that the house is fit for human habitation within the meaning of Section 4, Housing Act, 1957, and that it will remain fit for a period of fifteen years.

Without going into the merits of the so-called standard of fitness it is sufficient to say that a fit house is not necessarily free of defects.

Generally, little difficulty is experienced where an application for a grant is received from an owner/occupier for it is now the accepted practice to secure, after

discussion and agreement, the execution of works of repair which are undertaken at the same time as the improvement works.

Experience has shown that many houses which are legally fit—i.e., “not unfit”—need quite considerable amounts of money spent upon them for repairs. Particularly where rent controlled property is concerned, the cost of such works often bears an unreasonable relationship to rates value calculated on income derived from rents.

Is it not natural for officers to ask themselves the question, “Is it reasonable and proper to permit the improvement of this house, leaving the defects of repair unremedied?” In such a case, discussions as to fitness become critical and arbitrary, and the qualification contained in Section 4—“reasonably suitable for occupation”—meaningless.

MEAT INSPECTION

The total number of animals slaughtered at the public abattoir shows a decrease of approximately 1 per cent; pigs were reduced by 20 per cent at the public abattoir and by about 3 per cent at the bacon factory. This reduction approximates to the national average. Had the numbers of pigs slaughtered not fallen by so large a percentage the total at the abattoir would have shown an increase. There was an upward trend in calf slaughter which was a little difficult to account for having regard to the large number of animals slaughtered in controlling the Foot and Mouth Disease outbreak. It will be surprising if the number of calves slaughtered next year approaches this year's figure. Owing to the strict control of the movement of live animals at the peak of the outbreak, animals were slaughtered locally and the carcase meat transported to the consuming areas. This is probably one reason why the throughput at the bacon factory also shows a decrease.

Since the middle of September Sunday slaughter has been almost a regular feature due principally to the fact that an abattoir outside the City has been closed and an appreciable amount of Sunday slaughtering has been transferred to the Gordon Road Abattoir.

Table 12 shows the continued effectiveness of the Tuberculosis Eradication Scheme. During the year 32 animals were sent in as reactors, consisting of 15 cows, 5 steers/heifers and 12 calves. Post-mortem examination revealed tubercular lesions in the offal of 3 of the cows. One of the Irish cattle had tubercular lesions in the lungs, one English cow carcase and offal was rejected because of generalised tuberculosis. Both of these were reported to the Ministry as required under the notification order.

The overall incidence of cysticercosis has remained similar, cows showing a slight reduction of 0.09 per cent and in best cattle rising by 0.02 per cent. All affected carcasses were subjected to cold storage treatment in accordance with the Meat Inspection Regulations, 1963. The local cold stores also accepted affected carcasses sent by local authorities from outside the City; such carcasses are checked and stamped when treatment is completed.

The proposed modernisation scheme for the public abattoir has not yet been finalised. Much of the equipment is old and in need of urgent renewal. The use of the public abattoir for lecturing and demonstration purposes continues. A new feature has been the increased number of applications by schools for material for biology lessons, and for visits to the abattoir for instructional purposes. Most

students are agreeably surprised at the care taken to ensure that a fit supply of meat reaches the public.

PRIVATE SLAUGHTERHOUSES

Only one private slaughterhouse, attached to a bacon factory, is licensed in Bristol. The throughput here has fallen by approximately 3 per cent. This was due partly to the foot and mouth disease restrictions on the movement of live animals and partly to the reduced number of pigs available. Generally the standard is reasonable, but some extra works were requested when a visit was paid by an inspector of the Ministry of Agriculture, Fisheries and Food.

MEAT INSPECTION

All animals slaughtered in Bristol during the past year have been inspected in accordance with the procedure laid down in the Meat Inspection Regulations, 1963, by inspectors attached to the meat section with help from the district public health inspectors as and when required. Ritual slaughter, as such, is not practised at the abattoir. Sheep are slaughtered for followers of the Mohammedan religion by Mohammedans licensed by the local authority to slaughter after stunning. It appears that most of the Mohammedans in Bristol accept that stunning by the "electrolether" does not offend their religious principles.

Although the quality of animals slaughtered in Bristol has improved over past years, we still have to have recourse to Dr. H. R. Cayton, Director of the Public Health Laboratory, for assistance in determining some abnormal conditions found in food animals on post-mortem examination and I thank him and his staff for their ready advice and co-operation.

1,060 specimens of pigs' diaphragms have been submitted for detection of the parasite *trichinella spiralis*, to Dr. H. D. Crofton of the Zoology Department of the University of Bristol; no positive specimens were found. My thanks and appreciation are offered to Dr. Crofton and his staff for the help given in conducting these tests.

MEAT DEPOTS: COLD STORES

All the meat depots wholesaling fresh meat, whether English or imported (chilled or frozen) have been maintained in a reasonable condition. Extra sinks and hot water have been provided in three of the depots. Mutual Meat Traders, of West Street, have been taken over and now trade as Dalgety Meats, thus the last remaining link with the firm which was started by the butchers of Bristol after derationing in 1954 has disappeared. The dock strike disorganised the meat trade as far as imported meats were concerned, and some trimming was required when the meat had to be shipped via Rotterdam. Argentine chilled beef has disappeared from the depots as a result of the voluntary action of the importers because of the foot and mouth disease outbreak. The Christmas turkey trade was one of the best on record and there was very little trouble with the poultry sold in the City this year.

The Public Cold Stores were all maintained to a reasonable standard and managements have been found very co-operative.

KNACKERS' YARDS AND OFFENSIVE TRADES

There are only two licensed knackers' yards in the City of which only one is in constant use and it is probable that this one will cease to be licensed after this year. A part of these premises is now being used for other purposes and consequently do not comply with the current legislation respecting knackers' yards and unless the firm in ownership changes its policy the licence must lapse. Some of the premises handling slaughterhouse wastes leave much to be desired. An explosion recently occurred in one premises and here a considerable rebuilding programme is now in progress. When this is completed the nuisance caused by offensive smells will be under control.

PET SHOPS

Sampling of meat and offal from pet shops was continued and the type, number and results of such samples are shown in table 14. Table 17 shows the results of sampling of knacker meat and offal from pet shops over the last five years. All pet meats sampled are tested for shigellae and salmonellae. No evidence of shigellae was discovered. The totals vary year by year but it is interesting to note that the percentage of positive specimens this year is considerably higher than ever before. The total over the last five years averages out at 20.03 per cent and this is a rather high average for meat which is often not cooked before being fed to pet animals, but it has as yet not been possible to link a case of salmonella food poisoning with an infected pet meat. Can it be inferred that the housewife has profited from the publicity given to the potential dangers from pet meat and is treating it accordingly?

SEWER SWABS

Of the 83 sewer swabs taken from the two slaughterhouses, 10 (12.05 per cent) were found to contain salmonellae. This percentage is again fairly constant with previous years. The cattle lair set aside at the public abattoir for the bacteriological examination of the bedding was tested regularly this year. Of the 43 specimens submitted only 1 (2.32 per cent) has been returned as positive salmonella. Due to the build-up in depth of the bedding the experiment may have to be extended to a larger lair next year.

SCHOOL KITCHENS

Following a re-allocation of duties in the department, visits are made to school kitchens only on receipt of complaints concerning the condition or fitness of the meat supplied. Such complaints have been few in number. Complaints from the general public of the condition of meat purchases have also been relatively few in number and it is satisfactory to record that complaints from all sources regarding meat have been dealt with without recourse to legal action.

PIGGERIES

Piggeries in the City have again been paid regular visits. Conditions have in some cases been less than ideal and there is still difficulty in contacting part-time pig-keepers. There appears to be a great deal of uncertainty regarding the future among some pig-keepers. Many of the sites are proposed as land for tipping purposes and until this is finalised and/or new piggeries constructed a state of uncertainty will continue. As a result of the outbreak of foot and mouth disease visits have also had

to be curtailed, occupiers being somewhat doubtful of inspectors proceeding from piggery to piggery, although every precaution has been observed regarding foot-wear, disinfection, etc.

POULTRY INSPECTION (processing premises)

There are no poultry processing establishments within the district.

BUTCHERS' MEATS

Table 15 sets out the type of meat sampled and the country of origin. Of the 180 samples submitted for examination only one was returned as positive salmonella. The results this year again conform to the pattern of previous years; it would appear that butchers' meat is reasonably safe when it arrives at the shop.

A pilot scheme for the sampling of pickled cooked meats by the agaroid method was started this year. At first only a plate count was envisaged, but latterly Mac-Conkey medium was used to determine coliforms and Manitol Salt to determine *Staphylococcus Aureus*. All the samples proved negative to the last two media. The test consists of placing the sterile face of an agaroid sausage against the surface of the meat or blade to be checked and leaving it in contact for approximately ten seconds, then cutting off the contact surface slice of the agaroid with a sterile knife and placing it in a petri dish with the aid of a sterile stick. The petri dishes are numbered and recorded and returned to the laboratory.

Originally, three assumptions were made: (a) that the plate count from the surface of the cooked meat would be reasonable, (b) that the plate count from the surface of the blade of the cutter could be high and (c) that a plate count from the surface of the meat after cutting would show a correspondingly higher count. The results were so varied that the scheme was reconsidered and it was decided to change the sampling procedure as follows. A sample of a new brine pickle, together with an agaroid sample of the surface of the raw meat and cut surfaces of the raw meat were obtained and submitted to the laboratory; in each case the raw meat was cut with a sterile knife.

After pickling, further samples of the pickle and agaroid samples of the cooked beef were submitted for investigation. The blade of the cutter was also swabbed with alcohol to reduce the blade plate count and this has proved fairly successful. The results of these tests were again so varied that one is forced to the conclusion that clumps of bacteria occur in meat and a more detailed sampling procedure is proposed.

The cooking of the beef is carried out in the following manner. The meat is packed in "Cryovac" bags in a sealed gas cooker and raised to a maximum temperature of 200°F. When this temperature has been reached, usually at about 5 p.m., the gas is turned off and the cooker left unopened until approximately 7.30 a.m. the following morning. Due to the cooking method used and the varied counts found, there exists some doubt regarding the efficiency of the process for the destruction of any bacteria in the substance of the meat, or whether for the purpose the initial temperature is high enough or is retained for a long enough period after the gas has been turned off.

This can only be determined by the insertion of probes and we are hoping to obtain a temperature recording unit to ascertain the temperature achieved in the centre of the meat.

MILK AND FOOD INSPECTION

The past year has to some extent been one of taking stock and planning for the future. The temporary re-arrangement of district boundaries (made in 1965) has now resulted in three permanent districts being made.

Some of the duties regarding the registration of ice-cream shops, etc., were passed to the district public health inspectors and the food and drug section took over the responsibilities for the inspection of school kitchens (under the Food Hygiene Regulations), and I am pleased to report that by the end of the year all of them (some 118) have been visited.

NEW LEGISLATION

The Artificial Sweeteners in Food Regulations, 1967

These regulations supersede the Food Standards (Saccharin Tablets) Order, 1953, and the Artificial Sweeteners in Food Order, 1953.

The new regulations permit:

- (a) the sale of cyclamic acid, calcium cyclamate, sodium cyclamate and saccharin as artificial sweeteners in sweetening tablets;
- (b) permit the use of these artificial sweeteners in food sold for human consumption;
- (c) lay down compositional requirements for sweetening tablets containing permitted artificial sweeteners;
- (d) prescribe the names by which artificial sweetening tablets are to be described on labels;
- (e) prescribe specifications of purity for artificial sweeteners;
- (f) amend the definitions of "sweetened" in the Lead in Food Regulations and the Preservatives in Food Regulations, 1962.

The Cheese (Amendment) Regulations, 1966

The Cheese Regulations of 1965, which were made on the 31st December, 1965, prescribe compositional and labelling requirements for cheese, processed cheese and cheese spread.

The Cheese (Amendment) Regulations postpone until February, 1970, some of the requirements as to size and type to be used in the printing of the prescribed description or declaration on the label of cheeses.

The varieties of cheese for which fat and moisture standards are prescribed by the amendment regulations, 1966, are—Edam, Loaf Edam, Baby Edam, Baby Loaf Edam, Gouda, Baby Gouda, Danablu, Danbo, Havarti, Samsoe, Emmental and Gruyere.

Processed cheese which is described by its varietal name is required to comply with the fat and moisture standards prescribed for that variety, or to bear the prescribed description or declaration.

The Food (Control of Irradiation) Regulations, 1967

Except as mentioned below, the Regulations prohibit the irradiation of food products intended for sale for human consumption. They also prohibit the importation and sale of food and food products which have been subjected to irradiation.

The ban imposed by these regulations is a major step in the control of irradiation of food and food products for human consumption which was recommended by the Working Party on Irradiation of Food in their Report. The Regulations apply to all food and food ingredients (including drink, cream, any food containing milk, and chewing-gum) but not to water, drugs, live animals or birds. Nor do they apply to milk because the sale of irradiated milk is in effect precluded by the Milk (Special Designation) Regulations, 1963, as amended in 1965.

The Regulations do not prohibit the use of monitoring and other nucleonic equipment which subjects food to an amount of energy of radiation below a prescribed very low level (10 rad of ionising radiation and five million electron volts).

The Meat Pie and Sausage Roll Regulations, 1967

These regulations, which come into operation on the 31st May, 1968—

specify requirements for the composition of meat pies (including meat pies containing meat and egg, meat and cheese, or meat, egg and cheese) and sausage rolls.

—specify requirements for the labelling and description of meat pies (and similar products as above) and sausage rolls, and for the advertising of such products.

The regulations do not apply to any meat pie or sausage rolls less than 1½ oz. in weight or to any products containing the fat but no other meat of any animal or bird normally used for human consumption.

The under-mentioned legislation made in 1967 will not come into operation for some time.

- (a) The Sausage and Other Meat Products Regulations, 1967—coming into operation 31st May, 1969.
- (b) The Canned Meat Products Regulations, 1967—coming into operation 31st May, 1969.
- (c) The Solvents in Food Regulations, 1967—coming into operation 3rd November, 1969.
- (d) The Solvents in Food (Amendment) Regulations, 1967—coming into operation 3rd November, 1969.
- (e) The Coffee and Coffee Products Regulations, 1967—coming into operation 4th January, 1971.
- (f) The Margarine Regulations, 1967—coming into operation 4th January, 1971.
- (g) The Ice-Cream Regulations, 1967—coming into operation 4th January, 1971.

MATTERS OF INTEREST

Complaints of Metal Contamination in Food

Old stocks of tinned acid food may give rise to metallic contamination as was found in one complaint during the year involving Paprika purée. In this incident, due to the generation of gas inside the tin as a result of the acid attack on the metal, the contents issued from the tin with considerable force, on opening. The tin was purchased from a shop offering various tinned foods at a considerable reduction and on investigation eight further tins of Paprika purée were found. These tins were

immediately surrendered and sent for examination. It was found that the inside surfaces of the tins were blackened by corrosive attack of the acid contents. The contents had absorbed tin to the extent of 400 parts per million, which is in excess of the recommended limit of 250 parts per million.

A metallic taste in canned orange juice formed the subject of one complaint during the year. It was found on investigation that further cans of juice from the same batch were normal and satisfactory, but a line of discoloration on the inside of the tin complained of showed that the juice had been left in the tin for some time after it was opened. Under these conditions, the juice would develop a metallic taste fairly rapidly, and in order to prevent this from happening the contents of opened cans should be transferred to a non-metallic vessel.

Contamination by antimony is sometimes associated with the preparation of acid foods in old and chipped kitchen enamelware. One investigation, carried out at the request of a member of the public, concerned the making of jam in an enamel boiler. The jam was examined and found to be free from antimony, but the incident serves to remind us that there may still be in use old enamelware, which if chipped or otherwise damaged, could be dangerous if used for food having an acid content.

Bottled Beer

In some countries, notably the U.S.A. and Canada, a recent practice has been for brewers to add foaming and stabilising agents to bottled beer. Coincident with the use of these agents which contained cobalt, some deaths were recorded. With the voluntary discontinuance of the use of cobalt by the brewers, deaths ceased and the suspicion that cobalt was responsible became very strong.

In order to find the position with regard to cobalt in bottled beer in Bristol, 26 samples were obtained during the year and submitted to the Public Analyst for examination. None of these samples were found to contain cobalt.

Tea

An unusual complaint from a hospital sister was received concerning tea which had been made at home and was thought to have given rise to palpitation of the heart. The complainant having experienced this sensation did nothing about the matter until she was informed by an elderly relative, living in the same house, that he too appeared to be similarly affected after drinking the tea.

Samples of the tea were obtained and the Public Analyst reported: "Examination of the tea indicated that it was normal commercial blend. In particular an estimation was made of the caffeine content which was found to be 2.8 per cent. The normal caffeine range in tea is 2 to 4 per cent and hence there is nothing unusual in this respect. Caffeine has stimulant properties and an excessive amount might have explained the complaint." The complainant was informed of the report.

To date, no further complaints of this nature have been received.

Maggots in Bacon

In the month of June, a complaint was received regarding maggots alleged to have been found in bacon.

An inspector visited the complainant and was informed that the food in question had already been returned to the shop and was not, therefore, available for his inspection. Upon enquiry, the inspector was informed that the complainant had purchased $\frac{1}{2}$ lb. of bacon scraps, price 6d.

(In these days when one hears so much about our affluent society, it would appear that some are less affluent than others.)

However, the shopkeeper was visited and an apology received together with an assurance that the practice of selling bacon scraps would be discontinued.

Ice-Cream Vans

During the summer months, some 40 ice-cream vans were inspected under the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966.

As a result of these inspections, 18 notices were served, and 4 vans were taken out of service.

MILK

(a) Chemical Analysis

A total of 698 samples of milk, including 99 samples of Channel Island milk, were submitted for chemical analysis, of which 1 sample of ordinary pasteurised and 1 of Channel Island milk were found to be deficient in fat. Repeat samples in both cases proved to be satisfactory.

(b) Designated Milk

A total of 558 samples of pasteurised milk, including 103 samples taken from schools, were submitted to the laboratory for examination. Of these, 23 failed the methylene blue test and 3 failed the phosphatase test, but none of these failures were in respect of the school milks. Appropriate action was taken in each case.

149 samples of untreated milk were secured, of which 20 failed the methylene blue reduction test. 3 samples of the new Ultra-Heat Treated milk were taken, and each of these satisfied the prescribed tests as laid down by the Milk (Special Designation) Regulations.

(c) Biological Examination

86 samples were submitted for examination, and all were reported free from tubercle bacilli and brucella abortus.

The Liquid Egg (Pasteurisation) Regulations, 1963

There are no egg pasteurisation plants in the district.

Eight samples of liquid egg were submitted to the Alpha-Amylase test, 2 were unsatisfactory but repeat samples proved satisfactory.

MEDICINES AND DRUGS

247 samples of medicines, drugs and medicinal foods were submitted for analysis. Deficiencies or unsatisfactory labelling were revealed in the following articles:

Spirit of Sal Volatile (4 samples)

Tincture of Iodine

Energy Bar (2 samples)

Camphorated Oil (2 samples)

Ammoniated Tincture of Quinine

Halibut Liver Oil Capsules.

Appropriate action by repeat samples or destruction of stock was carried out.

PHARMACY AND POISONS

418 visits were made to “ listed sellers ” of Part II poisons, and there were also 17 visits to persons selling Part II poisons but who were not on the local authority’s list of sellers. As a result of these visits, applications to be included on the list were made and granted in each case.

36 samples were obtained during the year, none of which were found to be unsatisfactory.

FERTILISERS AND FEEDING STUFFS

15 formal samples of fertilisers and feeding stuffs were submitted to the Agricultural Analyst. All were found to be satisfactory, although, in three cases, there were discrepancies which were not to the prejudice of the purchaser.

Appropriate action was taken where necessary, but no legal proceedings were instituted.

RAG FLOCK

55 samples of rag flock were obtained and submitted for analysis. Only one sample contained an excess over the maximum amount of 30 parts of soluble chlorides per 100,000, this being by 14 parts per 100,000. A repeat sample was taken, and found to be satisfactory.

INFECTIOUS DISEASES

Food poisoning

84 notifications of food poisoning were received during the year, of which 34 cases involving 75 people were confirmed.

Salmonella typhimurium was the most common type of food poisoning, but in July there was a sudden outbreak of Salmonella brandenburg. Investigations were carried out revealing that the cause of the outbreak was infected chitterlings supplied by a wholesale butcher from outside the City.

Dysentery

The outbreak of dysentery which commenced in late 1966 continued well into 1967, reaching a peak in April and May, as indicated in the following table:

<i>Month</i>		<i>Notification</i>	<i>Confirmed cases</i>
January	...	26	30
February	...	39	55
March	...	60	93
April	...	107	164
May	...	151	184
June	...	75	76
July	...	45	31
August	...	23	11
September	...	13	3
October	...	13	11
November	...	11	14
December	...	3	2
Totals		566	674

Of the total number confirmed, approximately half were children, 332 in all (i.e. 132 nursery children and 200 school children).

Typhoid

There were 5 cases of typhoid notified during the year, and 2 of these were confirmed. None of the 4 notified cases of para-typhoid were confirmed.

NOTES RESPECTING TABLE 24

The table comprises:

- (a) complaints received direct from the public;
- (b) complaints received from other authorities;
- (c) defects, irregularities, etc., noted as a result of routine sampling by the inspectorate.

Foreign Bodies—" Personal Items "

Included under this heading are items of a personal nature which can be deemed to have entered the foodstuff as a result of inadequate personal hygiene and comprise cigarette end, button, finger bandage, wool-fibres, match-stick, etc.

" Building Materials "

Foreign bodies entered under this heading include stone, cement, copper wire and nails. These complaints are attributable to building or repair work being carried out at the place of manufacture or to misuse of such items as bottles followed by inadequate cleansing or rejection.

" Transit and Packing Materials "

Such items as string, thread, elastic band, drawing pin, and cellophane wrapping are included, all being connected with either the transit and packing of the finished product or of some ingredient thereof.

" Not True Foreign Bodies "

This heading includes items which are of the nature of the product but are not of the quality or substance normally demanded. Examples include gristle, soiled dough, bones, particles of vegetable matter, etc.

ATMOSPHERIC POLLUTION

This year has been one of some activity and also frustration as far as smoke control is concerned. The City and County of Bristol No. 8 Smoke Control Order was finally made in May and the operative date was to have been 1st October, 1968. Objections to the making of this Order were not altogether unexpected, and by the time the statutory six weeks' period had expired three had been received. Two of the objections were of a traditional nature concerning the violation of individuals' rights and the inability of the aged to change to a new fuel. The third objector, a coal merchant, did not state the reason for his objection. The public local inquiry was arranged for December, but some five days before the date fixed it had to be cancelled because one of the objectors claimed he had not been notified of its date and time. The inquiry has now been re-arranged for March, 1968, some ten months after the Order was made, with the result that the operative date has had to be postponed until October 1969.

There is no doubt that a revision of the procedure for dealing with objections is long overdue. It is quite absurd that such a small number of objections, in this case amounting to 0.036 per cent of the total number of domestic properties in the area, can delay a major progression of smoke control. If the Ministry are really serious in their urge to local authorities to hasten the progress of smoke control, then here is one example where some practical help and encouragement can be given; meanwhile, undaunted by the setbacks experienced with the No. 8 Smoke Control Order, the survey of the proposed Nos. 9 and 10 Smoke Control Areas is now under way.

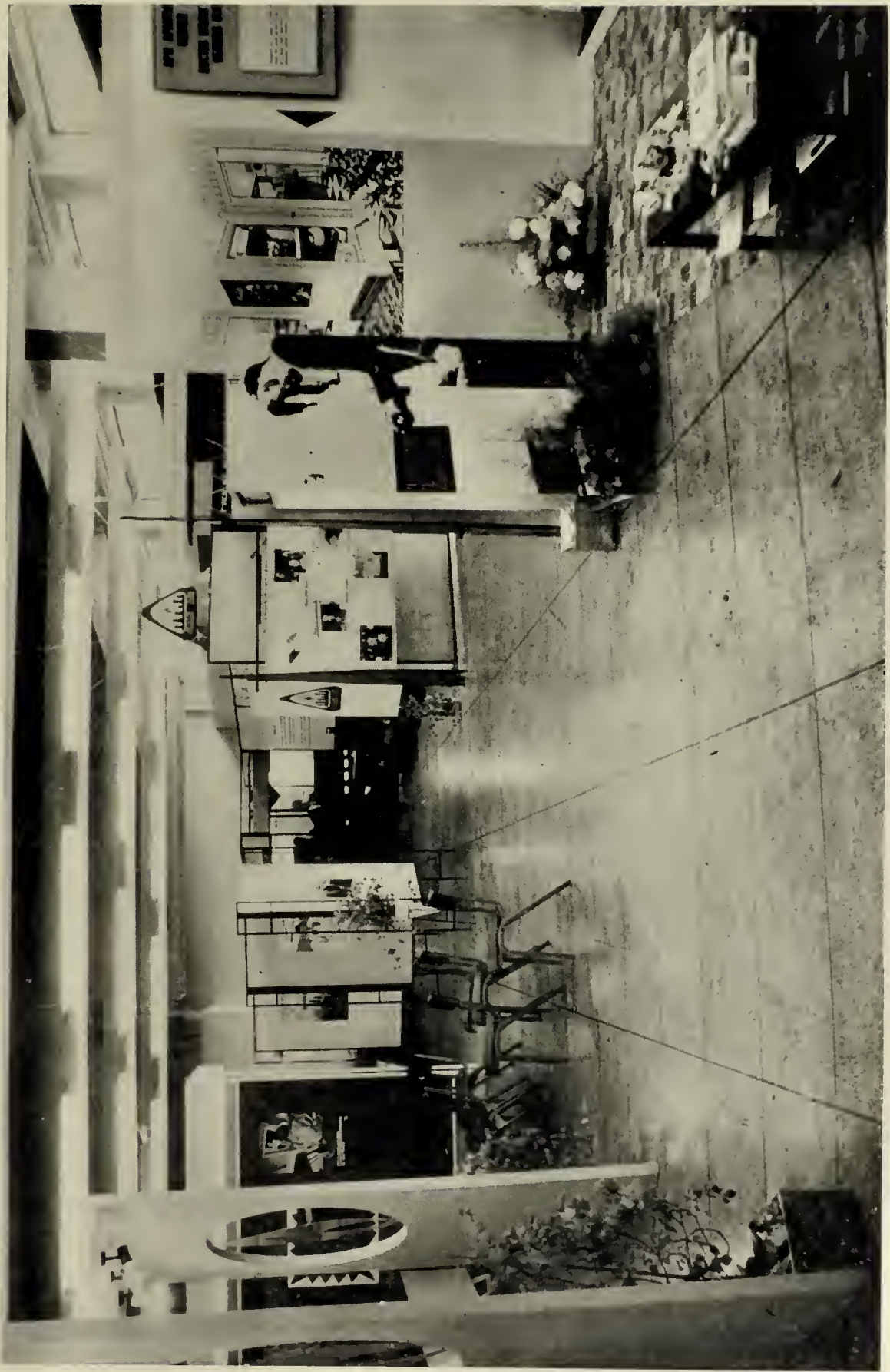
The proposed No. 9 Area is situated in the north-west corner of the City and contains a total of 6,447 premises including 5,938 dwellings; this will link up with the No. 8 Area. The proposed No. 10 Area is much smaller, lies to the west of the central smoke control area and will affect the Hotwells and Clifton Wood districts of the City. A total of 2,047 premises including 1,794 dwellings are contained within this area. It is envisaged that the Orders for these areas will be made in the first half of next year with a proposed operative date of October 1969.

The change in procedure to ascertain the adequacy of solid smokeless fuel supplies for proposed smoke control areas is a welcome one; this is outlined in the Ministry of Housing and Local Government's Circular 25/67. Hitherto, local authorities had to consult the representatives of the various fuel manufacturers and distributors concerning the supplies of solid smokeless fuels before making a smoke control order. Under the new scheme, which came into operation on 1st June, comprehensive advice concerning supplies of the whole range of solid smokeless fuels can be obtained from the regional representative of the Solid Smokeless Fuels Federation. This new system is obviously simpler and quicker and should enable local authorities to determine the availability of smokeless fuel supplies more easily.

The situation regarding smoke emission in smoke control areas, particularly in the No. 6 Smoke Control Area which affects some 3,000 acres in the south-west of the City, shows a marked improvement on last winter. This has been brought about by the department's activity during last winter, combined with an approach to the Coal Merchants' Federation of Great Britain which resulted in their National Clean Air Officer visiting the City and interviewing a coal merchant who was principally responsible for the delivery of bituminous coal in smoke control areas.

The department staged a Clean Air Exhibition during September in the exhibition hall of one of the City's principal department stores. The exhibition publicised the City's smoke control programme and presented photographic and statistical evidence of the effects of air pollution. The four fuel interests were represented and two of the exhibits, those for solid fuel and oil, featured appliances under fire; in addition there was a cinema area where films concerning clean air were shown. The exhibition was opened by the Lord Mayor, the Reverend F. C. Vyvyan-Jones, and the guest speaker at the opening ceremony was Dr. Albert Parker, C.B.E. The undertaking was most successful and was well attended although exhibitions of an educational nature, regrettably, do not have the mass appeal of some less worthy causes. Members of the staff were available throughout the eight-day period to give information and answer enquiries from the general public.

Of the industrial air pollution problems dealt with during the year, one was rather unusual and worthy of special note. It concerned the emission of metallic dust from a newly installed shot blasting plant on a trading estate. The original complaints came from occupiers of neighbouring industrial and commercial premises but after a short time, complaints were also received from residents living on a



Clean Air Exhibition

newly developed housing estate situated between a quarter and half a mile from the factory.

The process carried on is the shot blasting of steelwork in order to remove rust and mill scale, prior to the application of a protective coating. Deposits of a very fine metallic dust caused damage to cars and buildings, not to mention the health hazard involved—3.5 per cent of the dust had a particle size of less than 5 microns when comparatively clean metal was being blasted. More highly corroded metal produces a higher proportion of fine dust. The shot blasting plant was originally equipped with high efficiency cyclones to collect dust; these were operating at an efficiency of only 45.9 per cent and even lower with finer dust. It was found that with a modification to the cyclones, the efficiency could be raised to 70 per cent \pm 5 per cent. Clearly, with a relatively large proportion of fine particles (62 per cent below 40 microns) and twenty-four hours a day operation this efficiency was still not high enough if a nuisance was to be avoided.

As a result of the department's investigation and subsequent action, which included the service of an Abatement Notice, a new bag filter plant was installed and since this became fully operational no further nuisance has been experienced.

NEW FURNACES AND BOILER PLANT

Notifications in respect of 102 boilers and furnaces were received in accordance with section 3 (3) of the Clean Air Act, 1956. There were no notifications of solid fuel plants, whereas 60 were received regarding oil-fired plants, 41 gas plants and 1 electric boiler. These figures underline the increasing popularity of gas, particularly for the smaller boiler and heating plant of 4,000 Btu's/hr. and under. The number of notifications shows a significant increase over those received last year. This has arisen because of the policy of checking all plans for heating plant and where such is not indicated on the plan of a building which would normally require heat, the architect concerned has been contacted. These checks have revealed quite a large number of furnaces which would otherwise have escaped the department's attention.

A new Memorandum on Chimney Heights was issued this year replacing the one published in 1963. The main change is the relating of the lower limit of the application of the Memorandum to the estimated maximum sulphur dioxide emission, instead of to the maximum continuous rating of the boiler or furnace. This is much more sensible and makes allowance for the use of low sulphur fuels. The minimum height of forty feet is now abolished and the chimney height for furnaces at the lower end of the range is calculated with the aid of a new nomogram, giving a clearance of at least ten feet above the ridge height of the building.

ADMINISTRATION OF THE OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963

The programme, commenced early last year, of carrying out general inspections of office and shop premises to assess full compliance with the requirements of the Act was continued throughout the year. These inspections are being done area by area to locate those occupiers who have not notified the appropriate Authority of the employment of persons to work in their premises. Despite an increased awareness of the Act there seems to be no decrease in the proportion of occupiers who fail to give this notification.

As was to be expected the actual number of new notifications fell very considerably. There were 577 additions to the register and after removal from the records of those premises found to be no longer within the scope of the Act, the total number of premises remaining on the register at the end of the year was 8,396, 3,138 of which were offices, 4,275 retail shops, 468 warehouses, 495 canteens and catering establishments and 20 fuel storage depots.

During the year general inspections were made of 1,977 premises, comprising 818 offices, 894 retail shops, 137 warehouses and 128 canteens and catering establishments open to the public. By the end of the year 4,951 premises had been visited representing approximately two-thirds of the estimated number of premises to be dealt with before the initial general inspection of all offices and shops in the City is completed.

Whilst there is an increasing consciousness of the purposes of the Act and the responsibilities of all concerned, due, no doubt, in some measure to the work of the department in the last two years and a realisation that the requirements are no more than reasonably good management, there is still too high a proportion of premises being discovered on first inspection not to comply with all the requirements.

All too frequently those responsible retort "The work was done in accordance with the plans, what more can I do?" forgetting that with alterations to the numbers, ages, sexes and conditions of employment of their staffs, their responsibilities are continually changing and need constant review.

In some cases, two, three or even more reminders are required before it is realised that if the Act is not complied with the only way the local authority can carry out its duty of enforcement is by instituting legal proceedings.

On the other hand the visit of the inspector often triggers off a considerable amount of work. Plans have sometimes been formed for improving the ventilation or heating arrangements but the carrying out of the work is delayed for the time being perhaps until the periodical cleaning and redecoration of the whole premises is done. It needs a visit from the inspector to speed things up and then after the work has been done, the staff have been heard to remark that it was a more thorough cleaning and redecoration than had been done for a very long time.

Complaints from employees still tend to be in regard to temperature deficiencies although other matters are now being raised. The lack of precise information and the common practice of the complainant remaining anonymous often hampers the inspector's investigation. One recent complainant was so insistent on not giving information that even the request for the name and address of the premises concerned was refused!

The most common forms of offences continue to be dirty premises, poorly ventilated workrooms, absence of handrails to staircases, unsuitable sanitary conveniences and absence of supplies of running hot and warm water to washing facilities.

To provide a degree of flexibility in enforcing certain requirements i.e. room space for employees, temperature, provision of sanitary conveniences and running water for washing facilities, the Local Authority may grant an exemption from these requirements for a limited period if they are satisfied that compliance would not be reasonably practical. This allows time for premises to be brought up to

required standards. There were no applications for exemptions under these provisions during the year.

Three applications for exemption were received, however, two from large offices and one from a variety store to relieve the respective occupiers of the obligation to maintain a number of separate first-aid boxes with a responsible person in charge of each, where a first-aid room was provided on the premises. As adequate arrangements were made for the treatment of personnel in such a room in all three instances, certificates of exemption were granted.

During the year, 199 accidents were notified and 76 of these were investigated. Investigation disclosed the need for strengthening the safety provisions of the Act and a need for the Minister to make some of the long-awaited regulations.

Falls and accidents arising from the handling of goods are still the most common types of accidents. Better methods of instruction for personnel who have to work without close supervision and for those who are likely to have to act in an emergency would reduce the incidence of accidents such as the following: the bank office cleaner who, taking a short cut between floors by riding in a small goods lift, was trapped and needed extrication by the Fire Brigade. She suffered lacerations of her arm when it became trapped between the lift cage and shaft; the 69-year-old office cleaner who tried single-handed to move a manually operated hoist in order to clean part of the floor in the adjoining warehouse. He was found pinned under the hoist and suffered an injured back; an assistant manager, untrained in lift maintenance, who, trying to free persons trapped in the lift, failed to operate the safety switch and was injured by the normal control mechanism when the call button was operated on a lower floor.

There were several instances of junior members of office staffs running along a corridor and thrusting themselves through the glass panel of the office door!

Two accidents indicated the need for greater care and attention to such things as the obstruction of floors and danger from falling objects when small building operations have to be carried out in offices and shops during normal working hours.

The only new legislation during the year was the Offices, Shops and Railway Premises Annual Reports Order, 1967, which superseded an earlier order, prescribing the matters to be contained in the annual reports made to the Minister of Labour. It is to be hoped that the proposed regulations to control construction, maintenance and examination of lifts and hoists will soon be made and put into operation.

In sixteen instances where premises still did not comply with the requirements of the Act after repeated visits and letters drawing attention to the circumstances, it became necessary to institute legal proceedings. One inspector was ordered from the premises and prevented from making his inspection. In this case, also, legal action was taken against the occupier for his failure to afford the inspector the assistance and facilities he needed. These were the exceptions; in the main, owners and occupiers received inspectors courteously, were co-operative and ready to try and provide improved working conditions for their staffs.

Frequent requests continue to be received from trade associations for talks on the operation of the Offices and Shops legislation. These talks are usually given as background information to trade training courses.

ADMINISTRATION OF THE SHOPS ACT AND KINDRED LEGISLATION

The shops inspectors have again been mainly engaged throughout the year on duties connected with the Offices, Shops and Railway Premises Act.

The Health Committee granted exemption from the general closing hours requirement of the Shops Act in respect of the City and County of Bristol Flower Show, which was held at Durdham Downs on the 30th/31st August, and the 1st September. An application for a similar Exemption Order for the Bristol Ideal Homes Exhibition held at the Victoria Rooms in September was refused.

Exemption from the early closing day provisions was granted in respect of baby carriages, toys and nursery furniture in the Old Market Street area.

A Company that persistently kept open their shop after closing hours and were prosecuted on four occasions in 1966, had an appeal pending at the beginning of the year to the High Court of Justice Queen's Bench Division. This appeal was subsequently withdrawn and the Corporation costs reimbursed. Nine further charges, the hearing of which had been postponed until the result of the appeal was known, were proceeded with later in the year. For these offences the Company was fined the maximum of £20 on each charge and was ordered to pay £25 costs.

A complaint received in 1966 regarding assistants' meal breaks and half days, in a catering establishment led to a series of investigations in the early months of the year. Summonses have been served in relation to the contraventions discovered and these will, no doubt, be dealt with early in 1968.

The Minister of Labour again requested that Overseas Labour Officers should be given an insight into the duties of a shops inspector. The Specialist Inspector—Shops discussed the operation of the Shops Acts and the Offices, Shops and Railway Premises Act with representatives from India, Pakistan and Burma, in October.

PARLIAMENTARY BILLS

In the House of Lords and the House of Commons private members Bills were introduced relating to Sunday Trading and Closing Hours and Hours of Employment respectively. The House of Lords Bill is to be redrafted. Both Bills are intended to bring improvement in the measures dealing with conditions of employment of persons in shops.

The Annual Conference of the Institute of Shops Acts Administration was held at Hastings in September and was attended by Mr. K. C. Holden, Specialist Inspector—Shops.

RAT DESTRUCTION DISINFESTATION AND DISINFECTION

PREVENTION OF DAMAGE BY PESTS ACT, 1949

In conforming with the provisions of Part I, Section 2, of the Act, occupiers of nearly 3,400 premises notified the department that they considered their premises to be infested by rats or mice. A number of infestations were also found where a visit had been made primarily for a purpose other than pest control.

Every complaint was investigated and where necessary and requested, treatment was carried out. Supervisory visits were made in each case where the treatment was carried out by the occupier or by a private contractor.

ROUTINE INSPECTIONS AND TREATMENT

The present system of offering occupiers of premises the benefit of a regular routine inspection to ascertain if infestations of rats or mice have occurred has been greatly extended and now includes many of the larger premises in the City not subject to a contract with a private servicing agent.

As the re-development of the City continues apace, considerable attention is paid to premises as they become void and await demolition for road schemes, etc. Prompt action was necessary at Redcliffe Hill when, as a result of inspection, it was found heavy infestations of mice were spreading into the remaining occupied buildings. Special treatment had to be carried out and this is continuing. In this area in particular, and indeed, throughout the City generally, the City Valuer and his staff have co-operated fully with the pest control section by making available the keys of vacant buildings to allow inspection and treatment where necessary.

One of the major problems in this type of work is the large quantity of rubbish and refuse, often including foodstuffs, left behind when the premises are vacated.

As the result of an investigation originating from a complaint of rats, a dwelling-house was found to contain large quantities of rubbish and refuse, including foodstuffs, which was supporting a very active infestation of rats. Whilst making enquiries regarding ownership it was found that there were two further properties in the same ownership and in a similar condition. After obtaining the necessary authorisations a total of $4\frac{1}{2}$ cwt. of foodstuffs and over 4 tons of rags and other harbourage material were removed for immediate destruction. Treatment of the residual infestations is continuing.

DEFECTIVE DRAINS

The insistence upon tests wherever drains are suspect has done much to improve the standard of drain construction and this, coupled with the sewer treatment programme referred to later in this report, has made the number of defective drainage systems giving rise to surface infestations, almost negligible.

PORT OF BRISTOL AUTHORITY AREA

The docks and harbour installations in the City, and at Avonmouth and Portishead, together with the River Avon from the Bristol Channel to Hanham Weir, have again been controlled by a team of specialised operators. The value of allowing operators to gain experience of particular areas has been proven, in that very few complaints are now received from within this area.

SEWER TREATMENT

The sewer treatment programme has continued throughout the year and as a full picture of the sewerage system has now been obtained the opportunity has been taken to concentrate on areas of known high infestations and to link more directly the work in the sewers and on the surface.

OTHER PESTS

340 requests to deal with wasp nests was normal and shows no sign of a return to the very exceptional 1,542 dealt with in 1965.

GENERAL

At the close of the year considerable concern is felt at the apparent ineffectiveness of the rodenticides at present in use to control mice.

The rodenticide, Warfarin, has proved successful over the last 15 years and whilst reports of resistance have been notified from various parts of the country, no evidence was found here until a few months ago.

Whilst the inadequacy of measures to control certain mice infestations was under investigation, many reports were received from occupiers with the same problem. These reports indicated that all proprietary rodenticides were useless; the same problem arose in premises under private contract and all were asking what could be done.

The investigations so far carried out have revealed that not all mice infestations show resistance to Warfarin but where it does exist, it is almost complete. The alternative acute poison rodenticides are now being used but being less palatable, need pre-baiting, and therefore extra time and care, and are not, at the moment, proving a suitable alternative.

It is to be hoped that the problem of resistant mice within the City can be overcome in the near future.

DISINFECTION AND DISINFESTATION

Disinfection and/or disinfestation of premises shows an increase of over 700 but the number of articles dealt with has fallen by some 4,518. Disinfection for hospitals and nursing homes shows a reduction from 134 to 34. Disinfestation of blankets and cells for the police have been carried out whilst a number of ships at Avonmouth and the City docks have requested disinfection of bedding, cabins and ships hospitals. The value of the soiled linen service provided by the Health Committee has again been demonstrated by an increase of over 1,900 visits and soiled articles collected, laundered and returned by over 3,000. Table 26 refers to the work of the section.

Regular attention has been paid to the animal houses and dissecting rooms at Bristol University Veterinary College and to the lairage manure pits and gut rooms at the public abattoir. Spraying of walls and laying of insecticide and deodorant dust to combat fly breeding and odour has been carried out as required from April to October.

The problem of the unauthorised use of void houses by vagrants has, from time to time, required the employment of disinfecting staff personnel to clean up the filth left behind; assistance has also been given to cleanse houses before the "home helps" could be expected to carry on with their duties. On one occasion a void site, occupied illegally by "travellers," had to be cleansed by the staff. The occupation of this site was subsequently the subject of a successful prosecution noted elsewhere in this report.

Two cases of hides infected by anthrax were dealt with; the premises to which the hides had been sent were treated by flaming the floors and walls followed by disinfectant sprays. A number of pigs suffering from swine fever were also dealt with, the carcasses being destroyed by flame guns at the disinfecting station.

Two heavy infestations by steam flies were discovered in two of the City's large departmental stores; in these cases work had to be carried out after normal working

hours and four treatments in one case and five treatments in the other were necessary before the infestations were cleared.

Mosquito infestations in several small streams were dealt with during the summer months and one stream was cleansed and disinfected on two occasions after an unfortunate overflow of sewage into the stream.

During the year a new mechanical sprayer was purchased. This has been most useful for treating large areas such as the tips and the banks of the river and streams with disinfectant or deodorant.

TABLE 1

ENVIRONMENTAL HEALTH INSPECTIONS (ALL LEGISLATION)

Complaints and enquiries received ...	...	...	5,718	
<i>Visits:</i>		<i>Visits</i>	<i>Revisits</i>	<i>Total</i>
Dwelling houses (Public Health) ...	...	6,127	15,340	21,467
Dwelling houses (Housing) ...	...	4,029	4,813	8,842
Multiple occupation ...	...	76	301	377
Factories—power ...	...	614	557	1,171
Factories—non-power ...	...	56	40	96
Outworkers ...	...	119	63	182
National Assistance Act, 1948 ...	...	17	39	56
Nurseries/Homes etc. ...	...	66	64	130
Entertainment places ...	...	71	119	190
Movable dwellings ...	...	88	762	850
Sites ...	...	395	1,020	1,415
Building sites ...	...	223	442	665
Injurious weeds ...	...	5	16	21
Offensive trades ...	...	68	22	90
Keeping of animals ...	...	22	106	128
Piggeries ...	...	359	7	366
Poultry ...	...	313	14	327
Pet shops ...	...	65	19	84
Noise ...	...	322	1,477	1,799
Smoke observations ...	...	1,640	878	2,518
Smoke Control Area visits ...	...	1,523	117	1,640
Chimney height visits ...	...	117	82	199
New furnaces and fireplaces (notifications) ...	...	102	—	102
Dust and effluvia ...	...	202	1,510	1,712
Health education ...	...	131	36	167
Court attendance ...	...	65	15	80
Flooding ...	...	52	78	130
All other matters ...	...	1,231	2,223	3,454
Food premises—registrable ...	...	846	907	1,753
Food premises—non-registrable ...	...	3,351	4,085	7,436
Food vehicles/stalls ...	...	471	267	738
Butchers' shops ...	...	257	33	290
Meat markets ...	...	1,056	—	1,056
School kitchens ...	...	253	7	260
Cold stores ...	...	249	—	249
Food inspection ...	...	2,205	353	2,558
Dairies ...	...	46	2	48
Ice-cream manufacturers ...	...	18	7	25
Pharmacy and poisons ...	...	433	24	457
Rag flock ...	...	49	2	51
Sampling ...	...	1,820	77	1,897
Infectious disease ...	...	62	67	129
Dysentery ...	...	697	546	1,243
Food poisoning ...	...	136	240	376
Food complaints ...	...	510	349	859
Offices ...	...	811	7	818
Retail shops ...	...	875	19	894
Wholesale shops and warehouses ...	...	136	1	137
Catering establishments and canteens ...	...	125	3	128
Fuel storage depots ...	...	—	—	—
Other visits L.A. Circ. 5, Para. 7 ...	...	2,727	5,331	8,058
Sunday Entertainment Act ...	...	6	1	7
Young Persons (Employment) Act ...	...	6	1	7
Shops Act (retail) ...	...	826	588	1,414
Shops Act (wholesale) ...	...	7	—	7
Totals ...	...	35,974	43,077	79,051

TABLE 2

SUMMARY OF NOTICES SERVED
(Excluding Housing Legislation)

	<i>Informal</i>		<i>Statutory</i>	
	<i>Served</i>	<i>Complied with</i>	<i>Served</i>	<i>Complied with</i>
Dwelling houses (public health)	433	304	220	162
Multiple occupation	3	—	—	—
Common lodging houses	—	—	—	—
Factories—power	45	42	—	—
Factories—non-power	—	2	—	—
Outworkers	—	—	—	—
Nurseries/homes etc.	—	—	—	—
Entertainment places	—	1	1	1
Sites	—	—	5	—
Building sites	3	1	—	—
Injurious weeds	—	1	—	—
Keeping of animals	1	1	—	—
Noise	1	2	—	3
Smoke observations	—	—	1	2
Dust and effluvia	1	—	1	—
All other matters	11	8	1	4
Food premises—registrable	66	44	—	2
Food premises—non-registrable	343	329	3	5
Food vehicle stalls	43	36	—	—
Butchers' shops	2	4	—	—
Meat markets	2	2	—	—
Cold stores	—	—	—	—
Dairies	—	—	—	—
Ice-cream manufacturers	—	—	—	—
Rag flock	—	—	—	—
Offices	596	652	—	—
Retail shops	730	820	—	—
Wholesale shops and warehouses	98	77	—	—
Catering establishments and canteens	106	124	—	—
Fuel storage depots	—	—	—	—
Sunday Entertainment Act	—	—	—	—
Young Persons' Employment Act	—	—	—	—
Shops Act (retail)	4	5	—	—
Shops Act (wholesale)	—	—	—	—
Totals	2,488	2,455	232	179

TABLE 3

SUMMARY OF REMEDIAL ACTION (Excluding Housing Legislation)

Public Health

New drains laid	2
Drains repaired	179
Choked drains cleared	1,349
Tests made	93
Repairs/improvements to sanitary accommodation	45
Additional sanitary accommodation provided ...	1
Intervening vent space provided	1
Cesspools abolished	2
New and additional water supplies	—
Hot water installed	1
New/additional sinks provided	—
Wash basins provided	—
Roofs repaired	169
Dampness remedied	122
Other new and repair works	194
Yards paved and drained	1
Other nuisances abated	236
Houses cleansed/fumigated	101
Food store installed	—
Cooking facilities provided	—
Lighting improved	—
Ventilation improved	3
Heating provided	1
Overcrowding abated	—
Exhumations	2
Keeping of animals—improvements	—

Aged and Infirm Persons

Removals—voluntary	1
Removals—court order	6
Smoke Infringements dealt with	14
Noise nuisances dealt with	56
All other matters	425

Food Hygiene

Premises altered/repaired	80
Premises decorated/cleansed	211
Hot water provided	133
Sinks provided	16
Wash hand basins provided	85
Sanitary accommodation provided	—
Sanitary accommodation improved	33
Personal requirements dealt with	32
Equipment improved/replaced	35
Contamination risk reduced	17
First aid provisions	48
Lighting improved	12
Refuse storage improved	10
Stall/vehicles improved	15
Food transport improved	—
Ventilation improved	37
All other matters	72

Offices and Shops

Premises cleaned/redecorated	...	...	307
Heating provided/improved	...	...	60
Ventilation improved	...	...	291
Lighting improved	...	...	170
Sanitary accommodation improved	...	...	346
Sanitary accommodation provided	...	...	23
Washing facilities improved	...	...	318
Washing facilities provided	...	...	43
Seats provided	...	...	28
Eating facilities provided/improved	...	...	20
Floors, passages, stairs repaired	...	...	346
Machinery fenced	...	...	218
Other safety measures provided	...	...	425
First aid provisions	...	...	846
All other matters	...	...	1,806

TABLE 4

PROSECUTIONS AND COURT APPEARANCES

Of the 138 prosecutions taken and court appearances made, the following appear to be of interest :

Under the Public Health Act, 1936

Section 95	Failure to comply with Court Order	Fined £5
Section 95	Application for daily penalties for non-compliance with Court Order	Penalty of 1s. per day for 20 days
Section 94	Various nuisances	28-day Order made
Section 94	Various nuisances	28-day Order made
Section 94	Various nuisances	28-day Order made to procure completion of works and ordered to pay £2 2s. costs
Section 94	Various nuisances	7-day Order made and ordered to pay 10s. 6d. costs
Section 94	Various nuisances	Order to carry out work forthwith
Section 94	Various nuisances	28-day Order made.
Section 94	Various nuisances	21-day Order made.
Section 94	Various nuisances (effluvium)	28-day Order made and ordered to pay £5 5s. costs

Eight applications were made for Court Orders to secure compliance with Nuisance Notices with the results detailed above.

Under the Food and Drugs Act, 1955

Section 2	Dirt in a bottle of milk	Fined £20
Section 2	Cigarette end in loaf	Fined £25 and ordered to pay £3 3s. costs
Section 2	Foreign body in butter	Fined £20 and ordered to pay £5 5s. costs
Section 2	Washer in tin of gooseberries	Fined £20
Section 2	Razor blade in turkish delight	Fined £15
Section 2	Mouldy madeira and sultana cakes	Fined £10 and ordered to pay £5 5s. costs and witnesses costs of £2 4s. 10d.

Section 2	Mouldy steak and kidney pie	Fined £10 and ordered to pay £2 2s. costs
Section 2	Foreign body in bread roll	Fined £15 and ordered to pay £2 2s. costs
Section 2	Finger plaster in cheese roll	Fined £15 and ordered to pay £3 3s. costs
Section 2	Blow-fly larvae in scotch egg	Fined £10
Section 2	Rodent excreta in rice	Fined £15 and ordered to pay £6 6s. costs

Food Hygiene (General) Regulations, 1960

Regulation 16 (2)	Absence of hot water or hot water at a suitably controlled temperature	Fined £5 5s.
Regulation 26	Filthy condition of a vehicle	Fined £5 and ordered to pay £2 2s. costs
Regulation 5	Carrying on food business from premises exposing food to risk of contamination	Fined £3
Regulation 22 (2)	Having a food room communicating directly with a sleeping place	Fined £3

Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966, as amended

Regulation 15	Non-provision of water	Fined £5
Regulation 17	Insufficient first aid equipment	Fined £3
Regulation 16	Dirty wash hand basin	Fined £5
Regulation 18	Insufficient washing facilities for food and equipment	Fined £5
Regulation 17	Insufficient first aid equipment	Fined £3
Regulation 16	Inadequate supply of hot water	Fined £5
Regulation 17	Insufficient first aid equipment	Fined £3
Regulation 8	Dirty clothing	Fined £2
Regulation 16	Inadequate supply of hot water	Fined £5
Regulation 17	Insufficient first aid equipment	Fined £3
Regulation 16	No supply of hot water	Fined £3

Caravan Sites and Control of Development Act, 1960

Unauthorised stationing of two caravans on a site in the City	Fined £10
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Clean Air Act, 1956

Section 16	Smoke emission caused by burning cars	Fined £5 and ordered to pay £2 2s. costs
Sections 1 (1) and 2, and The Dark Smoke (Permitted Periods) Regulations, 1958, Regulation 3 (1)	Emission of dark smoke	Fined £5

Factories Act, 1961

Section 183	Intervening ventilated space not provided between w.c. and workroom	Fined £5 and ordered to pay £6 6s. costs
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Milk and Dairies (General) Regulations, 1959

Regulation 27	Dirty milk bottle	Fined £50 and ordered to pay £5 5s. costs
Regulation 27	Dirt in a bottle of milk	Fined £50 and ordered to pay £5 5s. costs

Housing Act, 1957

Section 27	Contravention of a Closing Order	
	(a) for permitting use	Fined £3
	(b) for using premises	Fined £3

Offices, Shops and Railway Premises Act, 1963

Sections 10 (1)	Insufficient washing facilities	Fined £1
16 (2)	No handrail on part staircase	Fined £1
Sections 17 (1)	Dangerous machinery not securely fenced	Granted absolute discharge
16 (2)	No handrail on part staircase	Fined £3
4 (1)	Staircase walls dirty	Fined £3
9 (2)	Dirty sanitary accommodation	Fined £3
50 (11)	Abstract of Act not exhibited	Fined £5
6 (4)	No thermometer provided	Fined £1 and ordered to pay £3 3s. costs
Sections 6 (4)	No thermometer provided	Fined £5
24 (1)	Insufficient first aid equipment	Fined £5
50 (1)	No Abstract exhibited	Dismissed. Ordered to pay £2 2s. costs
Section 16 (1)	Staircase obstructed	Fined £20
Sections 16 (1)	Poorly maintained floor and floor covering	Fined £10
15	Flaking paint to walls of meal room	Fined £10
Sections 16 (2)	No handrail to staircase	Fined £10
(50) (1)	No Abstract exhibited	Fined £2
Sections 9 (2)	Sanitary convenience not clean; leaking	Fined £10
15	joint to flush pipe; flaking distemper to walls	
Section 16 (2)	No handrail to staircase	Fined £10 and ordered to pay £5 5s. costs
Section 10 (1)	No supply of hot water	Fined £2 and ordered to pay £2 2s. costs
Section 17 (1)	Refrigerator motors not securely fenced	Fined 20
Section 16 (4)	Opening in floor not securely fenced	Fined 20
Section 16 (2)	No handrail to basement staircase	Fined 20
Section 16 (1)	Stockroom floor not properly maintained	Fined £5 and ordered to pay £10 costs
Section 9 (1)	Sanitary accommodation not ventilated. No intervening ventilated space between w.c. and workroom	Fined £5
Section 4 (1)	Dirty side passage	Fined £5 and ordered to pay £2 2s. costs
Section 9 (2)	Dirty and unventilated male and female sanitary conveniences	Fined £5
Section 10 (2)	Dirty washing facilities	Fined £5

Shops Act, 1950

Section 2	Failure to close for the serving of customers not later than the General Closing hours on nine occasions	Fined £20 on each offence (£180) and ordered to pay £25 costs
Section 19	Failure to give statutory meal intervals and weekly half-holidays to a number of assistants (43 charges)	13 charges withdrawn, remaining 30 charges adjourned—change of plea by defence

TABLE 5

FACTORIES ACT, 1961

Prescribed Particulars on the Administration of the Factories Act, 1961

PART I OF THE ACT

1. Inspections for purposes of provisions as to health (including inspections made by Public Health Inspectors).

Premises (1)	Number on Register (2)	Number of		
		Inspections (3)	Written Notices (4)	Occupiers Prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	43	96	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	1,436	1,171	45	1
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) ...	213	665	3	—
Total ...	1,692	1,932	48	1

2. Cases in which defects were found.

Particulars (1)	Number of cases in which defects were found				No. of cases in which prosecutions were instituted (6)
	Found (2)	Remedied (3)	Referred to H.M. Inspector (4)	by H.M. Inspector (5)	
Want of cleanliness (S. 1) ...	14	16	—	6	—
Overcrowding (S. 2) ...	—	—	—	—	—
Unreasonable temperature (S. 3)	—	—	—	—	—
Inadequate ventilation (S. 4) ...	26	20	—	1	—
Ineffective drainage of floors (S. 6)	—	—	—	—	—
Sanitary conveniences (S. 7):					
(a) Insufficient	37	30	—	1	—
(b) Unsuitable or defective ...	38	36	—	3	1
(c) Not separate for sexes ...	1	3	—	—	—
Other offences against the Act (not including offences relating to Outwork)	6	6	—	—	—
Total ...	122	111	—	11	1

TABLE 6

FACTORIES ACT, 1961
PART VIII OF THE ACT
Outwork
(Sections 133 and 134)

Section 133				Section 134		
Nature of work (1)	No. of outworkers in August list required by Section 133 (1) (c) (2)	No. of cases of default in sending lists to the Council (3)	No. of prosecutions for failure to supply lists (4)	No. of instances of work in unwholesome premises (5)	Notices served (6)	Prosecutions (7)
Wearing Apparel } Making, etc. Cleaning and Washing	70	—	—	—	—	—
Furniture and Upholstery	2	—	—	—	—	—
Stuffed toys	3	—	—	—	—	—
Textile weaving	1	—	—	—	—	—
Total	76	—	—	—	—	—

In addition to the above, outworkers are also involved in the following occupations:

Occupation	No. of o/w's	Occupation	No. of o/w's
Painting dolls	...	Embroidery	...
Christmas card preparation and packet labelling	...	Fabric Machinery	...
Handicrafts	...	Rug-making	...
Rosettes	...	Sorting stamps	...
Leatherwork	...	Decorating pots	...
Dolls' clothing
Typing
			1
			3
			3
			1
			1
			21
			—

TABLE 7

HOUSING PROGRESS CHART

		<i>From May 1955-60</i>	<i>1961-65</i>	<i>1966</i>	<i>1967</i>
Houses in Clearance Areas and already covered by operative Clearance Orders or Compulsory Purchase Orders ...	Pre-war 138 Post-war up to 5.5.55 73 } 211	113 72	19 —	1 —	— —
Houses in Clearance Areas for which Clearance Orders or Compulsory Purchase Orders have been submitted to the Minister but have not yet become operative ...	Post-war up to 5.5.55 } 56	56	—	—	—
Number of houses subject to operative Demotion Orders	Pre-war up to 5.5.55 } 258	201	27	—	—
Totals		442	46	1	—
Houses represented—Clearance Areas ...	...	3,592	746	13	64
Reported to Committee ...	...	—	425	6	10
Demolition Orders made on individual houses ...	...	157	27	2	10
Certificates of Unfitness—houses owned by Corporation ...	...	510	196	21	23
Undertakings given by owners to demolish ...	...	114	74	3	7
Unfit houses voluntarily demolished by Corporation and others ...	...	229	256	25	39
Grand Totals ...		5,044	1,770	71	153

TABLE 8

ACTION UNDER HOUSING LEGISLATION

<i>Houses inspected</i>								1966	1967
Section 9	...	...	...	...	...	...	...	—	—
Section 16	...	...	...	...	...	...	...	50	73
Section 18	...	...	...	...	...	...	...	30	25
Clearance Areas	...	...	...	...	...	...	...	22	69
For Report to Committee	...	...	...	...	...	...	...	9	23
Multiple occupation	...	...	...	...	...	...	...	—	1
Totals								111	191
<i>Represented to Committee</i>									
Section 9	...	...	...	...	...	...	...	—	—
Section 16	...	...	...	...	...	...	...	62	73
Section 18	...	...	...	...	...	...	...	24	27
Clearance Areas	...	...	...	...	...	...	...	5	13
Reported to Committee as unfit	...	...	...	...	...	...	...	9	16
Reported to Committee—in multiple occupation	...	...	...	...	...	...	...	—	1
<i>Orders made</i>									
Demolition Orders (Section 17, Housing Act, 1957)	...	...	...	...	...	...	...	3	10
Closing Orders—Whole House (Section 17, Housing Act, 1957)	...	...	...	...	...	...	...	41	52
Closing Orders—Whole House (Section 17, SS. 3, Housing Act, 1957)	...	...	...	...	...	...	...	—	—
Closing Orders—Underground Rooms and parts of buildings (Section 18, Housing Act, 1957)	...	...	...	...	...	...	...	25	24
Management Orders (Section 12, Housing Act, 1961)	...	...	...	...	...	...	...	—	—
Direction Orders (Section 19, Housing Act, 1961)	...	...	...	...	...	...	...	—	—
Undertakings not to use (Section 16, Housing Act, 1957)	...	...	...	...	...	...	...	—	6
Undertakings to demolish—Housing Act, 1957	...	...	...	...	...	...	...	3	6
Demolition Order substituted for a Closing Order (Section 28, Housing Act, 1957)	...	...	...	...	...	...	...	—	1
<i>Houses repaired</i>									
Section 9—informal	...	...	...	...	...	...	...	—	—
Section 9—formal	...	...	...	...	...	...	...	—	—
Section 9—formal by Corporation in default	...	...	...	...	...	...	...	—	—
Undertakings to repair	...	...	...	...	...	...	...	3	4
Undertakings not to use, cancelled after repair	...	...	...	...	...	...	...	1	—
Other repairs	...	...	...	...	...	...	...	—	—
Closing Orders determined after repair—whole building	...	...	...	...	...	...	...	41	28
Closing Orders determined after repair—part building	...	...	...	...	...	...	...	18	9
Demolition Orders revoked	...	...	...	...	...	...	...	—	—

TABLE 9

RENT ACT, 1957

Applications for certificates of disrepair	...	3
Refusals to issue certificates of disrepair	...	—
Certificates of disrepair issued—Full	...	1
Certificates of disrepair issued—Part	...	1
Undertakings given by landlords—Accepted	...	1
Undertakings given by landlords—Refused	...	—
Certificates of disrepair cancelled	...	4
Certificates as to remedying of defects	...	2
Refusal to cancel certificates of disrepair	...	7

TABLE 10

FOOD HYGIENE (GENERAL) REGULATIONS, 1960

(Summary of food premises subject to the Regulations grouped in categories of trade carried on in them)

<i>Trade</i>	<i>Number of Premises</i>	<i>Premises fitted to comply with Reg. 16</i>	<i>Premises to which Reg. 19 applies</i>	<i>Premises fitted to comply with Reg. 19</i>
Restaurants and cafes ...	334	332	334	334
Public Houses ...	435	432	435	435
Hotels—Boarding houses ...	112	112	112	112
Clubs—places of entertainment ...	65	65	62	62
Fried fish shops ...	102	101	102	102
Wet fish shops ...	55	55	55	50
Grocers ...	835	827	729	735
Greengrocers ...	245	237	188	196
Supermarkets ...	89	89	88	87
Factory canteens ...	147	147	146	146
Wholesale food premises ...	117	103	81	57
Chemists ...	128	128	—	—
School canteens ...	162	162	162	162
Flour and sugar confectionery ...	571	557	409	426
Bakers ...	64	64	63	63
Butchers ...	307	307	307	306
Dairies (processing) ...	10	10	9	9
Ice-cream manufacturers ...	7	7	7	7
Meat Products manufacturers ...	9	9	9	9
Other manufacturers (shell fish etc.) ...	6	6	6	6

TABLE 11

SUMMARY OF TOTAL FOOD CONDEMNED

	<i>Tons</i>	<i>Cwts.</i>	<i>Qrs.</i>	<i>Lbs.</i>	<i>Cans</i>
Meat and offal ...	121	11	2	27	
Meat (canned) ...	8	3	1	23	8,998
Fish ...	1	15	2	27	
Fish (canned) ...		18	1	17	3,103
Poultry ...		6	2	26	
Fruit and vegetables ...	38	18	1	22	
Fruit and vegetables (canned) ...	21	10	2	3	30,371
Fruit (dried) ...		1	1	11	
Other foods ...	6	1	0	15	
Other foods (canned) ...	2	12	0	14	7,819
Total ...	201	19	2	17	50,291

TABLE 12

TOTAL ANIMALS SLAUGHTERED

			1966	1967	Percentage
Cattle	...	...	14,554	15,732	+ 8·09
Calves	...	...	1,353	1,869	+38·14
Sheep	...	...	33,901	36,138	+ 6·60
Pigs	...	...	20,283	16,043	-20·90
Pigs (Bacon Factory)	...	...	14,486	14,113	- 2·57
Goats	...	...	39	3	-92·30
Totals	...	...	84,616	83,898	- ·85

TABLE 13

TUBERCULOSIS—CARCASSES—ORGANS REJECTED

		Number slaughtered	Totally rejected	Part carcase rejected	Any organ or part	Percentage	
						1967	1966
English Cattle	...	14,755	1	—	4	·027	·053
Irish Cattle	...	977	—	—	1	·102	·153
Total	...	15,732	1	—	5	·038	·055

TABLE 14

SAMPLES OF MEAT AND OFFAL FROM PET SHOPS

(a) <i>Horse Flesh</i>			Number <i>Salmonellae</i> Percentage		
Sample of					
Meat	...	...	10	2	20·00
Liver	...	...	22	2	9·09
Heart	...	...	20	3	15·00
Kidney	...	...	—	—	—
Totals	...	...	52	7	13·46
(b) <i>Knacker Meat</i>					
Meat	...	...	41	19	46·34
Liver	...	...	33	15	45·45
Heart	...	...	11	5	45·45
Kidney	...	...	1	1	—
Tongue	...	...	7	5	71·43
Totals	...	...	93	45	48·39
Knacker Meat	...	...	2 specimens with 2 species of salmonella		
Knacker Liver	...	...	1 specimen with 2 species of salmonella		
Knacker Heart	..	...	1 specimen with 2 species of salmonella		
Knacker Tongue	...	...	1 specimen with 2 species of salmonella		
Kangaroo Meat	...	...	1 specimen with 2 species of salmonella		

TABLE 15

SAMPLES OF MEAT AND OFFAL FROM BUTCHERS' SHOPS/MEAT DEPOTS

<i>Origin</i>				<i>Butchers' Shops and Meat Depots</i>	<i>Salmonellae</i>	<i>Percentage</i>
English Beef	...	...	...	44	—	—
Irish Beef	...	...	...	21	—	—
Argentine Beef	...	...	...	18	—	—
Scotch Beef	...	...	...	—	—	—
Minced Beef	...	...	...	22	1	4.54
English Pork	...	...	...	63	—	—
English Veal	...	...	...	12	—	—
Totals				180	1	0.55

Sewer swabs from slaughterhouses—

Number submitted ... 83 10 12.05

Samples of bedding from cattle lairs—

Number submitted ... 43 1 2.32

Note: In addition 149 agaroid samples from surfaces of meat and blade of slicing machine, submitted as part of a special survey.

TABLE 16

PIC AND POULTRY KEEPERS

<i>Number</i>		<i>Use</i>	<i>Licensed to boil swill</i>		<i>Visits</i>	
1966	1967		1966	1967	1966	1967
20	10	Keeping pigs only	11	10	—	—
28	26	Keeping pigs and poultry	17	21	—	—
22	19	Keeping poultry only	2	3	—	—
70	55	Totals	30	34	298	329

TABLE 17

SAMPLING OF KNACKER MEAT AND OFFAL FROM PET SHOPS
FOR FIVE YEARS 1963/67

<i>Year</i>	<i>No. of Samples</i>	<i>Positive Salmonellae</i>	<i>Percentage</i>
1963	148	6	4.05
1964	136	18	13.23
1965	145	40	27.58
1966	102	16	15.69
1967	93	45	48.39
Totals	624	125	20.03

PUBLIC ABATTOIR AND BACON FACTORY
CARCASSES AND PART CARCASSES—MEAT AND OFFAL CONDEMNED

A.—CARCASSES AND PART CARCASSES

Disease or condition	Cows		Steers and Heifers		Calves	Sheep		Pigs	
	Carcasses	Part Carcasses	Carcasses	Part Carcasses	Carcasses	Carcasses	Part Carcasses	Carcasses	Part Carcasses
Abscess ...	—	1	—	7	—	1	12	7	112
Actinobacillosis ...	1	—	—	—	—	—	—	—	—
Arthritis ...	—	—	—	2	—	—	—	3	6
Bruising/Fractures ...	—	4	—	7	—	1	1	1	33
Emaciation ...	1	—	—	—	—	—	—	—	—
Fevered ...	—	—	—	—	—	—	—	2	—
Immaturity ...	—	—	—	—	6	—	—	—	—
Jaundice ...	—	—	—	—	2	1	—	1	—
Johnc's Disease ...	1	—	—	—	—	—	—	—	—
Malignant Neoplasms ...	—	—	—	—	—	2	—	—	—
Melanosis ...	—	—	—	1	—	—	—	—	1
Moribund ...	—	—	—	—	—	—	—	9	—
Oedema ...	—	—	—	—	—	45	—	4	—
Peritonitis (Acute Septic) ...	—	—	—	—	—	2	—	41	—
Pleurisy and Peritonitis ...	2	—	—	—	—	3	—	23	—
Pleurisy (Acute Septic) ...	—	—	—	—	—	—	5	—	57
Pleurisy ...	—	—	—	—	—	—	—	1	—
Pneumonia (Acute Septic) ...	—	—	—	—	—	—	—	1	—
Pyæmia ...	—	—	—	—	1	1	—	1	—
Pyelo Nephritis ...	1	—	—	—	—	—	—	—	—
Septicaemia ...	5	—	1	—	8	20	—	31	—
Septic Mastitis ...	4	—	—	—	—	—	—	—	—
Swine Erysipelas ...	—	—	—	—	—	—	—	2	—
Umbilical Pyæmia ...	—	—	—	—	6	—	—	—	—
Uraemia ...	—	—	—	—	—	2	—	—	—
Urticaria ...	—	—	—	—	—	—	—	1	3
TOTALS	15	5	1	17	23	78	18	128	212
Tuberculosis ...	1	—	—	—	—	—	—	1	—
GRAND TOTAL	16	5	1	17	23	78	18	129	212
Cysticercus Bovis ..	1	—	17	—	—	—	—	—	—

1966

Tons		Qrs.		Lbs.		Tons		Qrs.		Lbs.	
Cwts.	Part	Cwts.	Part	Cwts.	Part	Cwts.	Part	Cwts.	Part	Cwts.	Part
9	19	0	1	14	8	1	5				
77	11	2	11	63	18	2	3				
5	14	3	8	4	1	1	17				
12	8	1	3	10	7	3	10				

B.—MEAT AND OFFAL

Public Abattoir—Carcass Meat	...
Offal	...
Bacon Factory—Carcass Meat	...
Offal	...

TABLE 19

SAMPLES SUBMITTED TO THE PUBLIC ANALYST

				<i>Samples</i>	<i>Unsatisfactory</i>
Milk	...	..	...	698	2
Ice-cream	...	...	...	106	—
Other foods	...	...	...	1,320	5
Medicines and drugs	...	...	...	247	11
Rag flock	...	...	...	55	1
Fertilisers and feeding stuffs	...	...	...	262	34
Water—baths	...	...	...	152	5
others	...	...	...	28	—
Pharmacy and poisons	...	...	...	36	—
Miscellaneous	...	...	...	149	34
Totals	...			3,053	92

TABLE 20

SAMPLES SUBMITTED TO THE BACTERIOLOGICAL LABORATORY

				<i>Samples</i>	<i>Unsatisfactory</i>
Milk—T.B. examination and brucella abortus				86	—
Pasteurised	...	...	...	455	26
Sterilised	...	...	...	20	—
Untreated	...	...	...	149	20
Ultra heat treated	...	...	...	3	—
Schools	...	...	...	103	—
Plant tests	...	...	...	86	3
Churn and bottle tests	...	...	...	602	98
Shellfish	...	...	...	36	15
Water	...	...	...	176	3
Ice-cream	...	...	...	112	13
Miscellaneous	...	...	...	67	7
Totals				1,895	185

TABLE 21

**SUMMARY OF BIOLOGICAL EXAMINATIONS OF MILK
FOR BRUCELLOSIS AND TUBERCULOSIS**

<i>Year</i>	<i>No. of samples found to be infected with Brucellosis</i>	<i>Tuberculosis</i>
1961}		
1965}	31 from 17 producers	Nil
1966	Nil	Nil
1967	Nil	Nil

TABLE 22

REGISTRATIONS

Under Section 16, Food and Drugs Act, 1955

The manufacture of ice-cream	13
The storage and sale of ice-cream	1,566
The preparation or manufacture of sausages or potted, pressed, pickled or preserved foods	321

Under the Milk and Dairies Regulations, 1959

Dairies	51
Distributors	470

Under the Rag Flock and other Filling Materials Act, 1951

Registered to use filling materials	14
Licensed to store rag flock	3

Under the Pharmacy and Poisons Act, 1933

Listed sellers of Part II poisons	348
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TABLE 23

QUINQUENNIAL LICENCES UNDER THE MILK (SPECIAL DESIGNATION) REGULATIONS, 1963

		<i>as at</i> <i>31.12.66</i>	<i>1966-70</i> <i>as at</i> <i>31.12.67</i>
To process pasteurised milk	...	9	9
To sell pasteurised milk	...	457	470
To process sterilised milk	...	2	2
To sell sterilised milk	...	488	495
To sell untreated milk	...	12	13
To sell ultra-heat treated milk	...	1	3

TABLE 24

FOOD COMPLAINTS INVESTIGATED

Commodity	FOREIGN BODIES											Incorrect Labelling/ Misrepresentation	Abnormal smell/taste/ colour	Others	GRAND TOTALS
	Glass	Metal	Insects	Personal Items	Building Materials	Transit/ Packing Materials	Others	Not true Foreign Bodies	TOTAL FOREIGN BODIES	Mould, etc.	Dirt, etc.				
General foods ...	1	8	14	2	—	4	8	2	39	7	—	3	26	6	81
General canned foods ...	1	4	7	5	—	1	—	3	21	4	1	—	8	2	36
Drinks (inc. ice-cream) ...	1	—	1	—	—	1	—	—	3	—	1	1	5	1	11
Milk ...	—	2	1	1	4	—	2	—	10	1	11	2	6	—	30
Bread ...	—	1	5	5	1	3	1	5	21	11	4	—	2	—	38
Confectionery (excl. meat products)	—	2	1	3	1	—	1	1	9	15	—	—	2	—	26
Meat and meat products ...	—	2	10	—	—	3	5	3	23	10	—	1	16	—	50
Canned meats ...	—	3	1	2	—	—	2	—	8	2	1	—	7	—	18
Fertilisers and feeding stuffs ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Others—pharmacy and poisons, medicines and drugs, rag flock, etc.	—	—	1	—	—	—	—	—	1	—	—	1	—	—	2
TOTALS ...	3	22	41	18	6	12	19	14	135	50	18	8	72	9	292

TABLE 25

RAT DESTRUCTION AND DISINFESTATION

Total number of complaints received during the year:

Rats	2,334
Mice	739

Complaints not finally dealt with by 31st December, 1966: 104

Analysis of above complaints:

	<i>Business Premises</i>	<i>Dwelling Houses</i>	<i>Local Authority Premises</i>	<i>Total</i>
No action required following inspection ...	49	209	25	283
Cleared by department	646	1,499	479	2,624
Cleared by occupier	33	133	—	166
Not finally dealt with (carry forward to 1968)	37	43	24	104
Totals ...	765	1,884	528	3,177

Visits and revisits for all purposes:

In respect of notifications under Part 1, Sec. 2, Prevention of Damage by Pests Act, 1949 ...	10,818
---	--------

Routine inspections:

Ship inspections—Avonmouth (visits and revisits) ...	1,178
Avonmouth Dock	1,547
Portishcad Dock	63
City Docks	370
City Airport	6
River/Canal Bank	148
Waste ground, vacant sites, etc.	792
Business premises (building sites, etc.)	169
Wasp nest destruction	679
Miscellaneous visits	1,033
Sewer treatment programme	20,997
Total ...	37,800

TABLE 26

DISINFECTION

Disinfection, Drain Tests, etc.

Premises disinfected and disinfested	17,774
Articles disinfected	51,407
Articles disinfested	2,376
Articles destroyed	5,565
Vermin repression—spraying (visits)	612
Cleansing of verminous persons (baths)	72
Scabies baths	10
Disinfections for Hospitals and Nursing Homes ...	34
Disinfecting jobs outside the Bristol area	35
Public library books collected and disinfected ...	—
Private library books collected and disinfected ...	—
Foodstuffs, etc. collected and destroyed—No. of cans ...	39,676
Other foodstuffs (lbs.)	45,659
Premises visited	366
Drain tests	41
Soiled linen service visits	17,246
Soiled linen service (articles collected, laundered and returned)	42,827
Other work (visits or journeys unclassified)	6,799
Total vehicle mileage for all purposes	40,563

TABLE 27

ATMOSPHERIC POLLUTION—SMOKE CONTROL ORDERS

SMOKE CONTROL ORDERS			Domestic	Commercial	Industrial	Other	Total	Acreage of Area	Date Order Made	Date Order Confirmed	Date Order in Operation
No. 1	...	...	315	1,053	109	33	1,510	220	9.12.58	24. 3.59	1.10.59
No. 2	...	...	113	79	34	12	238	50	24. 5.60	9. 9.60	1. 9.61
No. 3	...	...	438	582	18	39	1,077	100	24. 5.60	9. 9.60	1. 9.61
No. 4	...	...	632	113	12	10	767	100	24. 5.60	9. 9.60	1. 9.61
No. 5	...	...	27	15	1	5	48	15	24. 5.60	9. 9.60	1. 9.61
No. 6	...	...	10,625	149	27	31	10,832	3,000	13. 9.60	11. 5.61	1. 9.61
No. 7	...	...	3,523	81	5	24	3,633	1,580	11.12.62	16. 7.63	1.10.64
No. 8	...	...	8,276	177	17	75	8,545	2,150	23. 5.67	—	—

TABLE 28**OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963****(Registrations—General Inspections)**

Number of premises registered during the year	...	577
Total number of registered premises at the end of the year		8,396
Number of registered premises receiving an inspection during year	... ..	1,977

TABLE 29**OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963****(Number of visits of all kinds by inspectors to registered premises)**

Offices	... ..	818
Retail shops	... ..	894
Wholesale shops and warehouses	... ..	137
Catering establishments and canteens	... ..	128
Fuel storage depots	... ..	—
Other visits L.A. Circ. 5, Para. 7	... ..	8,058
Total	...	<u>10,035</u>

TABLE 30**OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963****(Analysis of persons employed by workplace)**

Offices	... ..	42,730
Retail shops	... ..	21,000
Wholesale departments, warehouses	... ..	6,050
Catering establishments open to the public	... ..	5,460
Canteens	... ..	667
Fuel storage depots	... ..	104
Total	...	<u>76,011</u>

TABLE 31**OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963****(Exemptions)**

Total number of exemptions granted	3
------------------------------------	--------	---

TABLE 32

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963
(Prosecutions instituted of which the hearing was completed in 1968)

<i>Section Nos.</i>	<i>No. of Informations Laid</i>	<i>No. of Informations Leading to a Conviction</i>
4	2	2
6	2	2
9	5	4
10	3	3
15	1	1
16	9	9
17	2	1
18	1	—
24	1	1
50	3	2
Total ...	29	25

No. of persons or companies prosecuted	...	...	10
No. of complaints under Section 22 ...	...	...	Nil
Interim Orders Granted ...	...	...	Nil

TABLE 33

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963
(Accident Reports)

Total No. of accidents reported to local authority	...	199
--	-----	-----

TABLE 34

SHOPS ACTS, 1950/65

<i>Visits</i>	Retail	...	...	...	...	826
	Wholesale		...	...	...	7
<i>Revisits</i>	Retail	...	...	...	...	588
	Wholesale		...	...	...	—
<i>Infringements</i>	Failure to exhibit notices		...	...	...	403
	Closing hours		...	...	...	39
	Sunday employment		...	...	...	29
	Half holiday		...	...	...	21
	Hours of young persons		...	...	...	9
	Meal intervals		...	...	...	14
<i>Verbal warnings</i>		...	...	...	...	1,936
<i>Warning letters</i>	...	...	...	...	...	4
<i>Legal proceedings</i>	summonses (in respect of) Cases		...	...	...	2

SUNDAY ENTERTAINMENT ACT—CINEMAS

<i>Visits</i>	...	...	...	...	...	6
<i>Revisits</i>	...	...	...	...	...	1
<i>Infringements</i>	holidays	...	...	...	...	—
	records	...	...	...	...	—
<i>Verbal warnings</i>	...	...	...	...	...	—

YOUNG PERSONS (EMPLOYMENT) ACT, 1938

<i>Visits</i>	...	...	...	...	...	6
<i>Revisits</i>	...	...	...	...	...	1
<i>Infringements</i>	Notices	...	...	...	...	—
	Sunday employment	...	...	...	...	—
	Half holiday	...	...	...	...	—
	Hours	...	...	...	...	—
	Meal intervals	...	...	...	...	—
	Night employment	...	...	...	...	—
<i>Verbal warnings</i>	...	...	...	...	...	—

Time worked outside of office hours and observation patrols by shops inspectors:

					<i>Hrs.</i>	<i>Mins.</i>
Evenings	...	...	...	...	64	55
Sundays	...	...	...	...	31	30
Wednesdays (p.m.)	...	...	...	...	84	12
Saturdays (p.m.)	...	...	...	...	6	15

THE REPORT OF THE SCIENTIFIC ADVISER AND OFFICIAL AGRICULTURAL ANALYST FOR THE CITY AND COUNTY OF BRISTOL FOR THE YEAR 1967

Incorporating the work on behalf of the County of Gloucester and the City of Gloucester

E. G. Whittle, B.Sc. (London), F.R.I.C.

INTRODUCTION

This report is the eighth since the return of the Department to full Corporation control in 1960 and my twenty-first since appointment as Public Analyst in 1947.

The overall number of examinations was 11,964, including smoke recordings. The "true" sampling figure is thus 10,765, which compares with 10,829 (1966), 9,866 (1965), 10,974 (1964), 9,784 (1963) and 10,314 (1962).

There has been a notable improvement in City sampling following upon increase of sampling staff. Fertiliser and feeding stuff samples for the City fell off, but notably increased for the County. Likewise the number of miscellaneous samples decreased somewhat, but Port sampling at Avonmouth increased by 250. The net gains and losses, however, leave the year's work at well over the 10,000 mark.

Sampling for pesticide work was well maintained and the required quota for the National Survey was duly provided.

Work on thiocarbamates developed rapidly and we are particularly indebted to Mr. J. Pagington, a sandwich course student, for a lot of work in connection with a survey of pesticides in mushrooms. Mr. A. C. Ellis, another sandwich course student, with us for the first six months of the year, also gave valuable assistance and was particularly interested in work on amphetamines and other drugs.

There have been six staff changes during the year. Miss K. Evason joined the staff in June and succeeded Miss Lewis who resigned in 1966. L. A. Monk was successful in obtaining the H.N.C. qualification and was promoted to a post as Analytical Assistant. Another similar vacancy was filled with the appointment of R. Fudge, G.R.I.C., in September. These posts were formerly designated as Senior Analytical Assistants and no reduction of status is implied by the dropping of the word Senior since the Junior Analytical Assistant is now designated as a Trainee Assistant. Miss L. Tuck was appointed in April to take up one of the new trainee posts.

Mrs. R. Bulpitt succeeded Miss J. Maclean in July. Miss Maclean had the opportunity of an extended holiday in the States with relatives and was obliged to resign in consequence. There were also two changes in the laboratory attendants, Mrs. J. E. Jones succeeded Mrs. Bees in February and Mrs. O. Lack resigned in October to be succeeded by Mrs. Chudley in December.

It is with regret and sorrow that I have to report the deaths of four old friends with associations with this laboratory. First Mr. E. T. Illing, formerly County Analyst for Somerset, died suddenly in January. In July Dr. Maxted, formerly special lecturer in catalysis died and in October Mr. Guy Davis, Clerk to the Gloucester County Council died suddenly just after his return from a short holiday abroad. H. M. Gould, formerly Chief Food and Drug Inspector, died after an accident in October.

I am happy to report that the acquisition of the fourth floor at Canynge Hall has been of great benefit. Even so the rapid developments in the analytical work may well mean further requests for space and it is not impossible that we may further expand to the third floor when the Public Health Laboratories move to new premises in about eighteen months' time. The need for expansion would result from increased pesticide work and further GLC and infra-red developments with drug work; the development of microbiological methods anticipated as necessary in feeding stuff examinations and increased work in connection with consumer protection legislation. We see the beginnings of this in the Toys (Safety) Regulations, 1967, which at the moment aims to control the amount of lead in paint films on toys and further in October 1968 will extend this to the control of the amounts of arsenic and the soluble compounds of antimony, barium, chromium and cadmium. It will be readily seen that in 1968 the examination of a toy with, say, four colours will, in fact, mean no less than twenty-four metal estimations! We are optimistic that spectrographic techniques will help to lessen the burden of analytical work upon such toys.

In December we had the incident of what became known within the laboratory at least as the Teddy Bears' Picnic. This arose from my September quarterly report made to the Health Committee in November, when I commented upon the presence of urea formaldehyde as a filling in certain imported teddy bears. Press and television interest very nearly got the matter out of focus and out of control. Telephone calls from all over the country were made to the laboratory, but eventually after examining over forty toys submitted to us and found satisfactory the trouble died down only to be briefly resurrected just before Christmas with a teddy bear which was, indeed, completely filled with the offending material. This toy had been in possession of a child for two years. The parents reported a continuing history of colds and two bouts of bronchitis, which might well have been irritated by inhalation of the very finely powdered filling. I hope to be kept informed of the child's medical history during the next year.

Interest in air pollution matters continued during the year and we were asked by the zoo authorities to set up two lead peroxide cylinders for sulphur pollution at the new Zoo Annexe at Cribbs Causeway. The indications are that there is no serious pollution problem, but a year or so of observations should help to determine the prospects.

Early in the year I had the opportunity to visit Harris's factory at Calne to discuss with the chief chemist, Mr. Cameron, matters of interest concerning the methods of calculation of the meat content of pies, with particular reference to fat transference from the pastry. Besides these discussions I had the opportunity of touring the factory and I would express my thanks to Mr. Cameron for a most instructive visit.

In January I had the privilege of addressing the Catering Managers at their Annual Dinner on the subject particularly of foreign bodies in foodstuffs and in February I gave a lecture to the Annual Conference of the Cake and Biscuit Alliance at the Connaught Rooms, London, on the subject of the Labelling of Food and Misleading Claims and Descriptions.

Another important function held in October was the Jubilee Dinner of the Bristol Section of the Society of Chemical Industry, which was attended by the President of the Society, its Secretary and many other notabilities in the chemical world. At this dinner the opportunity was taken to present Dr. A. Marsden, Secre-

tary of the Local Section for 47 years, with a Loving Cup in recognition of his long and distinguished service.

Finally, I must express my thanks to all members of this staff for their cheerful and willing service and good team-work throughout the year. I also acknowledge with grateful thanks the help and interest of the Chairman and members of the Scientific and Ancillary Services Sub-Committee, the Chairman and members of the Health Committee, and the Chairman and members of the Weights and Measures Committee of the County and not least thanks to the Inspectors of the Authorities whom we serve.

**SUMMARY OF SAMPLES EXAMINED DURING THE YEAR ENDED 31st DECEMBER, 1967,
FOR THE CITY AND COUNTY OF BRISTOL, THE COUNTY OF GLOUCESTER AND THE
CITY OF GLOUCESTER**

	<i>Bristol</i>	<i>Gloucester County</i>	<i>Gloucester City</i>
Milk	698	1,640	47
Food and Drugs	1,108	754	164
Waters, swimming baths and effluents	226	80	6
Fertilisers and Feeding stuffs	—	306	31
City	15	—	—
Avonmouth	247	—	—
Miscellaneous	538	83	4
Port Health—City	352	—	—
Avonmouth	1,001	—	—
	<hr/> 4,185	<hr/> 2,863	<hr/> 252
Rag Flock Act	55	—	—
District Health Inspector's samples	27	—	—
Pharmacy and Poisons Act	36	12	—
Air Pollution—Lead Peroxide	60	23	12
Deposit Gauges	66	22	12
Smoke Recordings—City	640	—	—
Miscellaneous	559	—	—
Spectrographic Analyses	1,140	52	2
Gas Chromatography Examinations	545	351	170
Chlorination	365	99	11
Merchandise Marks Act	—	10	—
National Pesticide Survey	23	12	2
Thiocarbamate Survey	358	—	—
	<hr/> 3,874	<hr/> 581	<hr/> 209
	<hr/> 8,059	<hr/> 3,444	<hr/> 461
		<hr/> Grand Total 11,964	

FOOD AND DRUGS ACT

NEW LEGISLATION, REPORTS AND RECOMMENDATIONS

Two reports appeared in January, one relating to a review of present safety arrangements for the use of toxic chemicals in agriculture and food storage, whilst the second report concerned the specific question of aldrin and dieldrin in foods.

The first report recommended the replacement of present voluntary safety arrangements; the Pesticides and Veterinary Products Precautions Scheme should be

replaced by a compulsory licensing scheme for all pesticide products used in agriculture, home gardens and food storage, and for all agricultural veterinary products, except those suitably controlled by other legislation.

On the question of residues of pesticides in foodstuffs this Committee considers that in general more data about residues in home produced and imported foodstuffs must be collected before residue limits are established in Great Britain. The need to establish tentative residue limits should be considered when sufficient evidence is available and consideration should be given to replacing them by statutory tolerances when the tentative limits have been in existence for a reasonable time. The Food Additives and Contaminants Committee recommend that statutory limits for residues of aldrin and dieldrin should be laid down in foods sold in the United Kingdom as follows:

- 0.1 ppm in food except mutton
- 1.0 ppm in mutton
- 0.003 ppm in liquid milk
- 0.02 ppm in baby foods including dried milk

The Food (Control of Irradiation) Regulations, 1967, prohibit the application of ionising radiation defined in regulation 2 to food intended for sale for human consumption. An exception is made in respect of a low level of such radiation (regulation 4). The permissible level of radiation to food is not more than 10 rad. of ionising radiation where the energy of the radiation delivered does not exceed five million electron volts. This will permit the continued use of certain types of nucleonic equipment which are at present used as measuring instruments. The regulations also prohibit the sale or importation of food which has been subjected to ionising radiation other than as provided by regulation 4.

The Cheese (Amendment) Regulations, 1966, operative from 1st February, 1967, redefined a compound product, required processed cheese described by its varietal name to comply with compositional standards and prescribed minimum milk fat and maximum moisture contents for the following cheeses—Edam, Loaf Edam, Baby Edam, Baby Loaf Edam, Gouda, Baby Gouda, Danablu, Danbo, Havarti, Samsøe, Emmentaler and Gruyère.

The Poison (Amendment) Rules, 1967, and the Poisons List Order, 1967. The Rules amend the 1966 List Order and in the new and amended list certain newer drugs appear for the first time. Thus Schedule 2, Part 1, adds other derivatives of ortho chlorobenzene, sulphonamide, corticotrophins both natural and synthetic; ethacrynic acids and its salts; fluanisone; glymidine; mescaline and its salts; pentazocine and its salts; procarbazine and its salts; prothionamide and tybamate and in Part II chlorfenvinphos.

Three important instruments which may be grouped together for consideration were:

- (a) The Meat Pie and Sausage Roll Regulations;
- (b) The Canned Meat Product Regulations;
- (c) The Sausage and Other Meat Products Regulations.

It would be impossible to summarise the contents and implications of these regulations within the scope of this Annual Report, but each regulation contains some very important definitions and lays down standards of composition under (a) meat pies, Scottish pie, meat and vegetable pie, meat and egg pie, sausage rolls in all cases, both cooked and uncooked and under (b) canned meat alone with jelly.

gravy, sauce and cereal, and under (c) sausages and other meat products, such as frankfurters, salami, etc.

The Sausage Regulations among other compositional matters reimpose standards for beef and pork sausages. The respective standards are 50 and 65 per cent, of which not less than half must in each case be lean meat.

The Artificial Sweeteners in Food Regulations, 1967, laid down standards for the composition of saccharin and cyclamates in full and half-strength tablets. Saccharin and cyclamates are the only permitted artificial sweeteners and after 1st December, 1967, were permitted to be used in food sold for human consumption. Doubts have been cast upon the wisdom of permitting widespread use of cyclamates. It is stated that these compounds undergo change to cyclohexylamine in at least 20 per cent of the population. This is a toxic metabolite and it is felt that too little is known about this substance, although dicyclohexylamine which can be formed from it, is recognised as being carcinogenic. The U.S.S.R. and other Eastern European countries have completely banned the use of cyclamates. The advocates of caution in the use of cyclamates appear to have a case and it may be wiser to withhold the wider use of this sweetening agent as envisaged after 1st December, 1967.

The Toys (Safety) Regulations, 1967. These Regulations were made by the Secretary of State under powers given by the Consumer Protection Act of 1961. Regulation 1 prohibits the sale of celluloid in toys, other than ping-pong balls. Regulation 2 prohibits on toys the use of any coating of paint which may contain lead and its compounds in excess of 11,000 ppm as Pb. After 31st October, 1968, a toy shall not have any coating of paint which contains arsenic or its compounds in excess of 250 ppm calculated on the dry paint film. Also after the same date a toy shall not have any coating of paint which contains soluble antimony, barium, cadmium or chromium or any soluble compounds of these elements in excess of 250 ppm, calculated on the dry paint film. The word soluble is defined and further the Regulations will apply to toys manufactured before the Regulations became effective.

In June 1965 and again in April 1966 the Minister of Health stated in the House of Commons that the Government intended to introduce legislation relating to medicines. In 1967 a paper described as *Forthcoming Legislation on the Safety, Quality and Description of Drugs and Medicines* was published giving in broad terms the reasons for the legislation, its scope and the general manner in which it will operate.

The Farm and Gardens Chemicals Act, 1967, made provision for the labelling of such chemicals and the Act is mentioned here because it may well involve evidence of analysis of some products. The Act will apply to any substance having properties of destroying or repelling insects, mites, molluscs, nematodes, fungi, bacterial organisms and viruses; destroying weeds or acting as bird or animal repellents, plant growth regulators, defoliants or desiccants.

Two reports were issued in July. The first related to cream and the main recommendations were that minimum fat contents should be laid down for whipping cream (35 per cent), whipped cream (35 per cent), half cream (12 per cent), and sterilised half cream (12 per cent) in addition to the present standards for clotted cream (48 per cent), double cream (48 per cent) and sterilised cream (23 per cent). It is further proposed to raise the standard of single cream from 18 per cent to 20 per cent. Cream standards are certainly due for revision since the existing legislation dates from 1951. Additional standards for Devonshire and Cornish cream seem desirable also.

The second report related to the use of cyclamates and reference has been made above already for the possible toxicity of the metabolites of cyclamic acid and its salts.

Proposals were made to amend the Skimmed Milk with Non-milk Fat Regulations, 1960. The Second Schedule of those Regulations was to be amended to exempt Trufood V. Formula Products, Enfamil products and SMA and SMA/S26 products from the requirement, to label containers with the words “unfit for babies,” provided the products conform to certain compositional requirements.

A Draft Order-in-Council to amend sections of the Merchandise Marks Act, 1926, was laid before Parliament in October. The amendments include the requirement that certain imported meat and edible offals must bear the mark of origin, together with amendment to the size of lettering and the indication of origin of certain prepacked chilled beef, frozen mutton, frozen lamb and frozen pork.

The Solvents in Food Regulations operative from 3rd November, 1967, laid down the following provisions:

- (a) Prohibited the use in food of all solvents except ethyl alcohol, ethyl acetate, diethyl ether, glycerol, glyceryl mono-acetate, glyceryl di-acetate, glyceryl tri-acetate, isopropyl alcohol and proylene glycol.
- (b) Laid down specifications of purity for all permitted solvents.
- (c) Laid down the form of declaration to be made on solvents when sold as such, and
- (d) stated that the regulations did not apply to any solvent or any food containing any solvent intended for export.

Following upon the Food Standards Committee’s Report on Claims and Misleading Descriptions published in August 1966 the Ministry presented proposals for Regulations in November 1967, which implemented most of the recommendations of the Report. In particular the proposals would extend the present controls on the various types of claims made for food and would restrict the use of certain words.

Reference must be made to five important items of legislation all made as Statutory Instruments in 1967. Four of these become operative on the 4th January, 1971, and they are:

- The Ice-cream Regulations, 1967.
- The Coffee and Coffee Product Regulations, 1967.
- The Labelling of Food Regulations, 1967.
- The Margarine Regulations, 1967.

The fifth Instrument was the Merchandise Marks (Imported Goods) No. 7 Order, 1934, Amended Order, 1967, which was made operative from 20th March, 1968.

FOOD AND DRUGS ACT, 1955

The adulteration rate for the year for the City only was:

<i>Total number of samples</i>		<i>1,806</i>
Ordinary Milk	...	0.16 per cent
Channel Island Milk	...	1.0 per cent
Other Foods	...	0.82 per cent
Drugs	...	3.54 per cent
All Food and Drugs	...	1.0 per cent

SUMMARY OF MILK ANALYSES—BRISTOL (ONLY)

Total milks (ordinary and Channel Island) ...	...	698
Fat deficient (ordinary) ...	...	1
Added water (ordinary) ...	...	Nil
Abnormal NFS ...	...	Nil
Poor quality milks—fat just less than 3 per cent	...	Nil
Channel Island—satisfactory ...	...	99
Channel Island—unsatisfactory ...	...	Nil
Milks examined for hypochlorite and found satisfactory		4

One milk proved too acid for examination.

This picture of milk examinations for Bristol shows an eminently satisfactory situation. Only two milks were found to be fat deficient throughout the year, one ordinary and one Channel Island, whilst all 69 school milks were satisfactory and free from any adulteration.

ADULTERATED SAMPLES OTHER THAN MILK

- YD.13 Spirit of Sal Volatile BP which was incorrectly labelled as BP. It is now a BPC item. It was also 60 per cent deficient in ammonia.
- WD.318 Salad cream, which contained 780 milligrams of potassium formate per 100 gram of the cream. Subsequently this compound was withdrawn as an ingredient of the salad cream, although the manufacturers stated that it was used as a flavouring and not as a preservative. It was stated to impart a salty taste without adding sodium chloride to what was a special dietetic product.
- YD.107 Tincture of Iodine BP found to be in excess with both iodine and potassium iodide to the extent of 35 and 33 per cent respectively.
- YD.110 Spirit of Sal Volatile BPC found to be 13 per cent deficient in ammonium carbonate and 43 per cent deficient in ammonia.
- VD.150 Whisky found to contain 14 per cent of added water. This was a formal sample.
- VD.157 Liquid egg samples both of which failed the alpha amylase test for
and effective pasteurisation.
- VD.158
- YD.137 Energy bar found to be deficient in protein. It was stated to contain 30 per cent protein and only 21.5 per cent was present.
- YD.143 Camphorated oil contained 26 per cent excess of camphor.
- YD.149 Camphorated oil contained 28 per cent excess of camphor.
- YD.155 Spirit of Sal Volatile contained 30 per cent excess of ammonium carbonate.
- YD.210 Spirit of Sal Volatile found to be 65 per cent in ammonia and 9 per cent deficient in ammonium carbonate.
- YD.211 Ammoniated Tincture of Quinine contained 18 per cent excess of quinine and was 84 per cent deficient in ammonia.
- YD.221 Halibut Liver Oil Capsules were 650 International Units of Vitamin A per capsule deficient on minimal requirements.

- YD.200 Lemon drink which contained sulphur dioxide 250 parts per million in excess of the permitted amount.
- YD.238 Energy Bar declared to contain 30 per cent of protein but only 21 per cent was found.

COMMENT ON OTHER FOODS AND DRUGS

- VD.29 Apple green essence contained Blue VRS, which from 26th June, 1967, became a non-permitted colour.

Thirty-one baby food preparations taken from Health Department Clinics were all found to be in satisfactory condition, free from excess moisture, without undue acidity and with no signs of infestation.

WD. 135 Cod fries contained 45 per cent fish, which is a satisfactory level if the article is regarded as a fish cake. It is not particularly satisfactory, however, when regarded in the light of the "normal" fish content of a fish finger, which averages 70 per cent fish. Cod fries and fish fingers are both essentially fish and batter.

XD.40 Cream rice pudding and XD.41 cream macaroni pudding contained respectively 5 and 2 per cent of additional water. Up to 5 per cent additional water appears consistent with normal good commercial practice.

Eleven cheese spreads. The Cheese Regulations of 1965 with Amendments in 1966 requires all the well-known cheese to comply with compositional standards for fat and moisture. Cheese spreads should contain not more than 60 per cent moisture and not less than 20 per cent fat in the article as sold. These samples ranged from 46 to 49 per cent moisture and 23 to 29 per cent of fat.

ZD.1, 2, 3, 7, 8 and 9, honeys, derived from English, Guatemalan and Mexican sources. Modern filtration techniques applied to honeys now mean that it is difficult, if not impossible, to find typical pollen grains characterising the possible sources of the honeys. It is, however, fairly common to find a few diatoms which must come from Kieselguhr or similar filtering media.

ZD.10 and 11, tongue pate and chicken pate, both contained wine of the order of 5 per cent. The chicken pate sample did not include wine in the list of ingredients.

A number of butter samples were examined and it is of interest to note that there is remarkably close compliance with the statutory maximum moisture figure of 16 per cent. Most samples fell within the 15.5 to 15.9 per cent range.

A number of samples of cheese satisfied the requirements of the 1965 Regulations. All the standard English cheeses, including Cheddar, Derby, Cheshire, Gloucester, Caerphilly and Lancashire, etc., have a minimum fat requirement of 48 per cent milk fat in the dry matter. Moisture figures range from 39 per cent maximum in Cheddar to 48 per cent maximum in Lancashire. The 1966 Amendment Regulations prescribed further standards for Continental cheeses, such as Edam, Gouda, Danish Blue, Havarti, Samsoe, Gruyere and Emmenthal.

A sample of ice-cream designated as Cornish was shown to be an ordinary ice-cream with vegetable fat only. One could quote several instances of the words Devonshire and Cornish being used to imply a better quality article and often with pretensions to cream and butter. Unfortunately at the moment, legislation does not require any implied standards where these words are used.

Six pasties submitted with complaints of poor condition accompanied by mould growth were, in fact, found to be satisfactory and in edible condition. This type of problem emphasises the need for retailers to ensure that pies, rolls, pasties and similar perishable goods are in fresh condition on receipt and further that there should be a good and controlled turnover procedure to ensure that the minimum of time should elapse between delivery and sale of such goods.

A pork sausage had a satisfactory total meat content of 65 per cent of which 38 per cent, however, was fat. The 1967 Regulations, operative from May 1969, will require the amount of fat to be limited to not more than 50 per cent (half) of the total meat.

A polony sausage contained only 36 per cent of meat and was regarded as of poor quality in the light of the 50 per cent minimum meat content, which the 1967 Regulations will require in May 1969.

Thirty-five samples of beers and ales were examined for cobalt, but without result. It had been alleged that cobalt compounds had been used as foaming agents to produce a good froth on beers, etc., and that in Canada this practice had resulted in a number of deaths. The evidence was not, however, entirely convincing and could have implied significant over-dosage with the cobalt compounds.

Throughout the year a wide variety of meat products, canned and otherwise, were examined for meat content and in general all were in good accord with standards laid down in 1967 Regulations, which do not, however, become immediately operative.

Several samples of marzipan were examined during the year and most showed ground almond contents of the order of 30 per cent. One particularly good sample had as much as 49 per cent. A proposed Code of Practice would require a minimum of 25 per cent of ground almonds.

Sixteen samples of spirits were examined and all but two complied with the statutory requirement of at least 65 per cent of proof spirit. Indeed, they showed some 70 per cent of proof spirit at which strength such alcoholic liquors are sent out from the bonded warehouses. One sample of whisky showed at least 14 per cent of added water, based upon the statutory requirement. This would mean at least 20 per cent of added water based upon the 70 per cent proof spirit strength.

A sample of gin showed not less than one per cent of added water based on the statutory requirement and this would certainly mean something more of the order of 7 or 8 per cent watering, having regard to the 70 per cent figure. The gin was returned as suspicious.

FERTILISERS AND FEEDING STUFFS ACT

			<i>Formal</i>	<i>Informal</i>	<i>Irregular</i>
Fertilisers (City)	...	...	8	7	3
Feeding Stuffs (Avonmouth)	...	...	26	221	27
			—	—	—
			34	228	30
			—	—	—

The comments upon the three irregular fertilisers were for excess insoluble phosphate, excess soluble and insoluble phosphate and excess nitrogen with some reversion of phosphate.

Comment on the 27 feeding stuffs showing irregularities may be summarised thus:

Two with low protein, twelve with excess protein, sixteen with excess oil, four with low oil and one sample withdrawn at the request of the manufacturers. Included in the summary are samples with two discrepancies. There are eight provender mills within the port area at Avonmouth and sampling has been well maintained throughout the year. Indeed, a 1967 return of samples examined by various authorities, indicated that 659 of some 8,000 samples taken were submitted to this laboratory from the Bristol City, Gloucester City and Gloucester County Authorities. That is 8 per cent of the national sampling—a satisfactory record indeed.

A problem which has caused some bother during the year and which has not yet been satisfactorily resolved is the question of the addition of urea to feeding stuffs as a nitrogenous food adjunct. We have taken the attitude in common with reputable manufacturers, that the protein declared for statutory purposes is the true protein without regard for any so-called “crude protein” provided by the addition of urea. Some unscrupulous individuals are making capital by including this urea nitrogen as true protein and it is hoped that new regulations will suitably deal with this matter.

WATERS AND SEWAGE ANALYSES

<i>Bristol</i>				
City water from tap at Canynge Hall	...	...	...	15
City water from pumping station Jubilee Road	...	...	...	13
Ships in port	...	...	...	8
Seepage waters	...	...	...	16
Council House (heating system)	...	...	...	8
Sewage effluents	...	...	...	4
Swimming baths water	...	...	...	152
Miscellaneous	...	...	...	10
				226

All the samples of mains water from Canynge and Jubilee Road were satisfactory with the exception of one sample from Jubilee Road where there was some doubt as to the sampling point and which gave some evidence of contamination.

Of the samples of drinking water from ships in port, three were contaminated with sea water.

Bristol Waterworks Supply

Sampled at		<i>Canynge Hall</i>	<i>Jubilee Road</i>
No. of samples	...	15	13
<i>Range of variation (parts per million)</i>			
Total solids	...	240–286	184–261
Chlorine as chloride	...	13–16	15–17
Nitrate nitrogen	...	1.31–3.04	0.50–2.74
Total hardness	...	184–230	126–216
Permanent hardness	...	44–54	41–57

Special Survey of the mains water supply to the City

As a result of a letter from the Ministry of Housing and Local Government in November, dealing with the problem of lead in drinking water, a survey of some twelve samples taken as the first drawn water after standing in pipes overnight was made. The World Health Organisation lays down that the figure of 0.3 parts of lead per million must not be exceeded after 16 hours of contact with lead pipes.

The samples surveyed were taken by members of the staff resident in and around the city and the areas thus covered included, Bishopston, Ston Easton, Thornbury, Wotton-under-Edge, Timsbury, Winterbourne, St. George, Kingswood, Lawrence Weston, Whitchurch and Winscombe. The concentration of lead ranged from nil to 0.041 ppm, with pH values of 7.2 to 8.1, total hardness from 90 to 348 ppm and permanent hardness from 38 to 106 ppm. Routine colorimetric lead based on sulphide determination would probably have resulted in all samples being returned as lead nil. For the purposes of differentiation the more refined dithizone method was used and it was demonstrated that at the time of this sampling, the mains water was well within the W.H.O. requirement. It is proposed to further survey the area each quarter for the next year.

FIELD SURVEY

The actual time spent on field work in 1967 has been somewhat less than in recent years, because of greater demands made on the Officer's time for the preparation of items required, particularly by the rapid development of GLC and infra-red work. Nevertheless, the variety of problems and their distribution has been as wide as ever.

Consultations have taken place and assistance has been given to both City and County when difficulties have arisen with swimming or paddling pools or with water supplies or sewage treatment plant. Routine checks on various installations in Gloucester County has also continued.

In illustration of the type of problems which have been tackled, albeit not always entirely successfully, the following may be quoted:

There was an on-site consultation at the Bristol City Docks when a cylinder of boron trifluoride was dropped overboard. It was agreed that the cylinder must be recovered, but this was done only after considerable difficulty and only with the expertise of naval divers.

At Avonmouth Docks drums of aluminium chloride from Canada and in a Russian vessel were found to be leaking and giving off acid fumes with the risk of damaging a cargo of beans. The recommendation to use respirators in moving the cylinders nearly precipitated a dock labour crisis.

A most evasive oil-like odour was alleged to be occurring in a high block of flats and this was investigated on behalf of the Housing Department. The only common factor was the presence of two insulated expansion joints between three sections of the building. The insulated material at some time must have become contaminated with oil, possibly on site during the building of the flats. Remedial measures are likely to prove awkward and expensive.

For Gloucester County the following matters have been dealt with: The possible chlorination of a water supply to farms and cottages at Tortworth; rising damp under a vinyl tiled floor at Tetbury; the disintegration of cement mortar at Cheltenham Technical College and the possibility of lung damage by asbestos fibres from a factory near Stroud.

A comprehensive report on the alleged nuisance created by a provender mill in a village adjacent to Cheltenham was stated by one of the Councillors concerned to have averted a civil war between the public and the Parish Council.

Problems in the workshop have been greatly helped with the acquisition of the new Myford lathe. The making and adaptation of parts of equipment used in

modern analytical apparatus has proved valuable and money saving. Not only has apparatus been made rapidly and at a fraction of trade cost, but also in as much as that it would have proved difficult if not impossible, for any manufacturer to be found who would have undertaken such specialised tasks.

RAG FLOCK ACT

Fifty-five samples of flock materials were submitted and were examined microscopically to ascertain the nature of the material and thence as required by the Regulations for the amount of chloride present. It is satisfactory to report that only one sample contained an excess of chloride 44 parts per 100,000. The maximum permissible amount is 30 parts per 100,000.

PHARMACY AND POISONS ACT

Thirty-six specimens were examined, in many instances to determine in fact whether the article came within the provisions of the Act. I quote first a few of the articles outside the Act:

Slug bait pellets which are based on metaldehyde are free from restriction on sale as are disinfectants based on dichlorometaxyleneol; disinfectants with small quantities of sodium hydroxide; ant killers based on chlordane or piperonyl butoxide, weed killers based on simazine; insect killers based on DDT, Lindane or pyrethrins.

Products, however, such as cloudy ammonia with more than 5 per cent w/w of ammonia; kettle scale removers containing formic acid or more than 50 per cent of phosphoric acid and hair dyes and shampoos containing diamines are all within the regulations as Part II poisons. Phenol preparations with more than 60 per cent phenols or metallic phenates are Part I poisons and with certain exceptions other phenolic products fall within the provisions as Part II poisons.

One other product requires comment. This was a soot and smoke abater powder consisting of ammonium, sodium and copper chloride. It would be free from restriction on sale and appears relatively innocuous. However, in general any "do-it-yourself" attempts to clear chimneys in this manner could result in a very undesirable chimney fire.

Mouse and rat baits based on small quantities of warfarin are safe to use and have ousted more objectionable baits containing arsenic, zinc phosphide and red squill, all popular in years gone by.

GAS LIQUID CHROMATOGRAPHY (GLC)

As last year, most of the GLC work was concerned with a survey of organo-chlorine insecticides in fruits and vegetables. The work was expanded to include a survey of organo-phosphorus insecticides for the period May-September. The table of 600 samples below includes those submitted by the Port Health Authority and also samples submitted under the National Pesticide Scheme (eleven).

The 1966 results and details of methods were published in the Journal of the Association of Public Analysts and has already received considerable attention from workers in pesticide residue analysis. Noteworthy samples were as follows:

Apples

One sample of American Laxton Superb contained 0.66 ppm methoxychlor, an organo-chlorine insecticide which has been found for the first time.

Another sample of unknown origin contained 2.80 ppm DDT.

Currants

Significant levels of 0.70, 0.56 and 0.24 ppm DDT were found in currant samples. One sample containing 0.36 ppm DDT also contained 0.26 ppm gamma BHC. Another sample contained 0.76 ppm gamma BHC. Most of these samples were of Australian origin.

Fish Cake

A fish cake was sampled because it was known that the shop was using a thermal dispenser unit of gamma BHC. This sample contained 0.10 ppm gamma BHC.

The use of such insecticide dispensers is most reprehensible and yet there is little information on how widespread is their use or how much gamma BHC can get into foodstuffs. An attempt will be made in 1968 to answer, in part, these questions.

Gooseberries

Three samples of the total of four contained DDT at levels of 0.91, 0.70 and 0.52 ppm.

Green Pepper

One sample contained 0.16 ppm DDT.

Lettuce

High amounts of 2.46, 1.36, and 0.55 ppm gamma BHC were found in Dutch and English samples.

Prune

A sample submitted by the Public Health Authority contained 0.46 ppm DDT.

Sultana

Five samples contained 0.61, 0.41, 0.31, 0.26 and 0.19 ppm DDT.

SPECTROGRAPHIC EXAMINATIONS

The major work of this section is concerned with the examination of canned goods principally from the Avonmouth and City Docks and is directed to the routine assessment of tin and lead contamination. The recommendation for tin in foods is a maximum of 250 ppm and for lead the maximum limits are laid down in the Lead in Food Regulations, 1961, which require canned fish and meat to contain not more than 5 ppm of lead. Several other foods have their own special limits, for example food colourings are permitted up to 20 ppm of lead, calculated on the dry colouring matter; and most other foods are contained within the 0.2 to 5 ppm (for solid pectin).

Using spectrographic techniques developed by a former member of this staff as long ago as 1952, we have been able to speed up routine examinations of canned goods taken by the Port Authority whilst it is possible to detect and determine lead to the order of 0.5 ppm.

Port health work took another significant jump in 1967 to 1,140, compared with 1,001 in 1966, which figure was over 200 in excess of the 1965 level of sampling.

For the most part we do not experience any significant or alarming metal contamination of foods and those items showing excess tin and lead are mentioned elsewhere upon Port Health samples in the miscellaneous group of examinations.

A large number of samples of canned hot pickles, chutneys and fruits from Asia were heavily contaminated with tin and eventually surrendered and destroyed. They were all highly spiced and of distinctly potent odours and were apparently intended for the Indian and Pakistan populace.

A number of 6lb. cans of corned beef contained excessive lead derived from heavily soldered seals and these were eventually rejected and returned to the country of origin. As reported elsewhere canned potatoes showed severe frost damage, but no excessive metal troubles.

The section has also been of great help with general problems of metallic contaminants in blood and urine, complaint samples and in painted toys.

MISCELLANEOUS

1.	City of Bristol general examinations	...	...	149
2.	Biochemical and toxicological examinations	...	...	74
3.	Foreign bodies, insects and infestation	...	...	117
4.	Gloucester County	...	...	83
5.	Education Department	...	...	28
6.	City Engineer's Department	...	...	73
7.	Port of Bristol Authority	...	...	15
8.	Port Health	...	...	1,353
9.	Housing Department	...	...	11
10.	City Architect's Department	...	...	5
11.	District Inspectors' samples	...	...	27
12.	University of Bristol Department of Bacteriology			1
13.	Public Health Laboratory Service	...	...	3
14.	Toys (Safety) Regulations, 1967	...	...	4
15.	Toys—Examination of Teddy Bears	...	...	44
				<hr/> 1,987
				<hr/>
	Smoke Recordings—City	...	...	604
	Smoke Recordings—Miscellaneous	...	...	559
				<hr/> 1,163
				<hr/>
			Grand Total	<hr/> 3,150
				<hr/>

1. City of Bristol—General Examinations

The 149 specimens submitted included a number for laboratory information relating to control samples for laboratory investigations. Of the remaining samples the following are of interest:

A bottle of vodka was found to contain only a trace of alcohol and for practical purposes was a tap water with all the characteristics of the local mains water. The substitution appeared to have been a practical joke but the problem was never really satisfactorily resolved.

A bottle of alleged cherry wine contained no wine but a mixture of cutting machine oils. Again it was impossible to suggest just how such a fluid came to be present in the bottle.

A sample of milk chocolate animals was covered with a thin greyish bloom, shown to be due to fat bloom caused by poor and possibly prolonged storage.

A number of samples of deposits were delivered to the laboratory in March, in connection with a University Rag incident involving pedal cars used on the Whitchurch Airport. A number of participants in the pedal car race and also some onlookers were troubled with facial and neck rashes, which were finally assessed as due to a combination of the effects of wind, sun and traces of phenol in dust raised during the races.

A dust sample taken from a window frame proved surprisingly to be a pure culture of mould spores of the species of *Mucor*.

A kettle descaler was shown to contain sulphamic acid as the active principle. This acid appears to be increasingly used for such purposes.

A home-made blackcurrant jam stated to have been prepared in enamelled ware was examined for soluble antimony, but without result.

A number of unopened cans of orange juice were in satisfactory condition and it was apparent that in some opened cans the juice had been allowed to stand too long. Such juice should preferably be emptied promptly into a non-metallic container.

A white powder submitted by post had been discovered in a household by the husband, who was anxious to ascertain its character. The powder was associated with a fragment of a label and proved to be prochlorperazine, probably sold as stemetil—a tranquillising drug.

A number of meat samples ex-Avonmouth Docks were taken from mutton carcasses as a result of alleged taint. This problem caused considerable trouble here and in London and Southampton and was never really satisfactorily resolved. In a few samples there was some suggestion of a paint-like taste, but this was not confirmed. A large proportion of the carcasses were subjected to treatment with ozone and these subsequently proved acceptable.

No doubt as a result of interest in the breathalyser test we were asked to consider the alcoholic strengths of communion wines. An unfermented wine contained not more than 1 per cent of proof spirit, whilst another designated as a Selected Wine for Communion contained 27 per cent proof spirit. Obviously on the amount consumed on such occasions there could be no suggestion of failing the breath test, but no doubt some enterprising individual might suggest it as an excuse!

A cauliflower which had developed an unusual greyish colour after cooking was examined and it was found that the colour was natural to the red cabbage with which the cauliflower may well have been in contact during transportation and storage. A less likely suggestion was that the colour might be derived from beetroot.

A so-called magic bottle contained some 15 millilitres of a fluid which was a suspension of mineral oil in water with a trace of amyl acetate. The fluid was well sealed off in the bottle and was by no means readily accessible for, say, an unsuspecting child to drink the fluid.

2. Biochemical and Toxicological

Seventy-four specimens, mainly bloods and urines, were submitted by Regional Hospitals, The Students' Health Service of the University of Bristol, the Public Health Department and Dr. Smith, H.M.M.O. for factories.

Several specimens of urine submitted from University students showed mercury contents at levels approaching poisoning. The students all had histories of working in a laboratory where spillages of mercury had occurred over a considerable period of time. Apparatus for the detection of mercury in the laboratory air had been in operation, but had given faulty readings of the mercury concentrations.

The use of soft drugs of the amphetamine type were of considerable interest to Dr. Wood of the Health Department and with the kind co-operation of Dr. Tyldesley of the Kingswood Classifying School a number of urines, 48 in all, were made available to us throughout the year. Considerable T.L.C. work was carried out, but of the specimens examined only two showed any amphetamine. Controlled dosages with 5 and 10 milligram amounts of the drug indicated that it was not likely to be detected in less than 12 hours after dosage.

Dr. Smith, H.M. Medical Officer for Factories, requested the examination of several urines for arsenic which ranged from nil to 40 microgram per litre. The normal range is stated to be nil to 140 micrograms per litre.

A follow-up urine sample of one of the University students involved in the mercury incident noted above, showed a marked reduction of mercury in a period of six months since the first sampling.

Samples of wall plaster and paint fragments showed varying amounts of soluble lead which could have caused lead poisoning in a child who had allegedly eaten significant amounts over a period of several months.

3. Foreign bodies, insects and infestation

117 specimens were submitted and they showed the usual wide variety both of insects and foreign bodies, which find their way into foodstuffs. A few of the more interesting will be noted:

An orange drink contained four discs of compressed jute fibres, possibly used as bottle sealing pads, although there was no evidence to support this.

A sample of baked beans, contained several small cream coloured particles thought to be larvae, but shown to be the immature radicles of the beans.

Frozen garden peas contained a ground beetle of the family Carabidae.

A portion of boiled ham contained several lengths of shredded cellophane, a similar material to that used to wrap the meat.

A bread contained portions of a cockroach and a meat pie two bristles, probably from a brush.

A portion of Turkish Delight contained a piece of hard steel with a copper coating. One edge of the metal appeared to have been sharpened.

A grapefruit contained creamy white particles of naringin, a compound naturally associated, particularly with the rind and pith of the fruit.

A currant loaf contained a stone partially coated with tarry matter.

Canned apricots contained a small beetle of the Chrysomelidae family, commonly found on waste ground.

A full cream milk was found to be thick and glutinous due to change of laevulose into laevan after prolonged storage.

A frozen hake cutlet contained numerous short black strands thought to be due to some physiological abnormality of the fish and possibly involving the development of melanine. Its true nature was not established.

A sample of rice was badly affected by rodent droppings, confirmed by rodent hairs.

A pastry purchased by an individual at a country inn on the outskirts of Bristol was alleged to contain the tooth of a dog or a cat. The complainant was much happier to learn that the offending object was the incisor tooth of a rabbit or a hare.

A milk bottle contained algal growth and light-red resting cells of the *Haematococcus*.

A butter contained a small portion of a coarse wrapping paper.

Samples of root ginger were infested with the Drug Store Beetle, *Stegobium paniceum*.

Coffee beans were heavily infested with the *stephanoderes hampei*.

A steak-and-kidney pudding contained a 1½-inch bent nail.

A margarine contained a one-inch rubber adhesive plaster.

A beef curry contained bones identified as those from the neck of a chicken.

A pork luncheon meat contained a piece of black plastic material so curved and shaped as to suggest part of a sealing ring.

Among the many insects submitted the following were identified: Honey bee, the *Ephestia* moth, *Attagenus pello*, *Ptinus tectus*, *Attagenus piceus*, the bed bug, the Wharf borer, Ants, Cockchafers, Dust lice, *Stegobium paniceum*, *Bradycellus harpalinus*, *Niptus Hololeucus* and Pharoah's Ants. Several of these occurred more than once during the year.

4. Gloucester County

The 83 specimens examined are considered as usual in the County Report.

5. Education Department

The 28 samples examined were mainly contract items taken to assist the Department in assessing the best value for money spent. Items included scouring powder, foam cleaner, floor sweeping compounds, soaps and detergents and disinfectants.

6. City Engineer's Department

73 samples were submitted, mainly soils and waters for determination of sulphate content and pH values. The lead content of three solutions was also required.

7. Port of Bristol Authority

The fifteen specimens submitted included a vermiculite examined for possible health hazard, two sherries ex-Cyprus for sulphur dioxide content, an asbestos powder with iron impurity, a sulphur, a sand, samples of blue and dust asbestos and sheanut meal. Through the Port Safety Officer samples of zinc residues were examined for other toxic metals. The Safety Officer also requested help in the identification of the remains of the explosion of what proved to be a 4-inch naval shell. It is appropriate here to acknowledge with thanks the prompt and excellent co-operation of the R.A.O.C. Bomb Disposal Unit of Southern Command based at Wilton, Wiltshire.

8. Port Health

1,353 samples were submitted from both City and Avonmouth Docks. This is an increase of 240 samples over 1966, which was itself a record of 250 samples above 1965.

Avonmouth Docks

The bulk of the samples, 1,001, came via the main Docks and included 772 canned goods, which were for the most part free from undue metallic contamination. Instances of failures will be mentioned in the following comments on the more interesting items:

Canned tomatoes ex-Italy showed tin contents approaching the maximum recommended figure of 250 ppm.

Six samples of corned beef showed lead figures in excess of the permitted 5 ppm maximum. Duplicate analyses were not particularly consistent and one sample showed 8 and 20 ppm on duplicated samples. The highest lead figure was 30 ppm. The results tended to suggest minute metal (solder) particles in the mass of the meat (6lb. cans). A further 24 samples of the same meat, but different code marks, produced similar figures. The stock was withdrawn by the importers and returned to the country of origin.

Four out of six samples of tomato paste gave tin figures ranging from 105 to 205 ppm with the remaining two showing 270 and 320 ppm. Early disposal of the stock was advised.

Twelve samples of canned new potatoes ex-Canada were found to be in poor condition with the potatoes in a spongy and split condition due to excessive low temperature storage with evidence of thawing ice on the cans. This had occurred during shipment.

A number of samples of dried apricots contained excessive preservative. The range was 2,300 to 3,600 ppm. The maximum permissible amount is 2,000 ppm.

Sixteen samples of pickles, chillies, amla, harar, cauliflower and mango chutney preparations ex-India were in a very poor state. Many cans were blown and lead and tin figures were excessive. The whole consignment was submitted for destruction.

A hot dog relish contained alum equivalent to 370 parts per million. The addition of alum to food is not permitted in this country, but in Canada and the USA aluminium salts are allowed as firming agents. The addition was declared and after considerable correspondence with the importers and the Ministry the latter gave as its opinion that alum used as a firming agent was not a preservative under the Preservative Regulations, 1962. There are no specific regulations controlling the use of alum in food and sections 1, 2 and 8 might be invoked under conditions of excess of alum. It is also necessary to declare the presence of alum under Part II of the Labelling of Food Order, 1953. The Ministry further stated that alum will be included in additives being considered and upon which a report is due to be published in 1968. Following upon this incident alum was found also in mixed pickles of the order of 0.18 per cent, calculated as potash alum and a sliced cucumber with 0.68 per cent. The matter is thus resolved as to what is good manufacturing practice in any particular set of circumstances.

Samples of loganberries contained lead ranging between 2 and 3.5 ppm. It is unusual to find loganberries with lead of this order and on balance the results were sufficiently close to 2 ppm as to permit the consignment to be released.

Samples of corned beef, ex-South-West Africa, were quoted as containing 5 per cent of cereal. They were found to contain nearly 90 per cent of meat, about 5 per cent of cereal and the same addition of added water. Eventually the 1967 Regulations, operative on 31st May, 1969, will require that products such as corned beef shall consist wholly of meat.

City Docks

352 samples were examined and again the bulk, 291, were canned goods.

Fruit jellies were in general satisfactory condition and contained only permitted colourings. Some green coloured sweets contained Blue VRS, which is scheduled for exclusion as a colouring as from 26th June, 1967.

A sample of tomato ketchup was alleged to be strongly acid. This was not surprising when it was found that a layer of vinegar had separated at the surface of the ketchup. Thorough shaking of the product before use was the obvious answer to the trouble.

Several samples of coconuts in shell were found to be in a sprouting condition. In this state the meat was tough and fibrous and the nuts might well prove to be unsaleable.

9. Housing Department

Eleven samples were submitted and included—a scale deposit which was examined for composition; three concrete blocks and materials examined for assessment of the reason for disintegration of the blocks and seven samples connected with efforts to free drains of collected sludge. This latter problem involved the examination of a cleaner, a rust remover, two neutralisers and a proprietary drain cleanser.

10. City Architect's Department

The five samples examined were a fungal growth, two waters for sulphate and pH values and a liquid and scrapings for evidence of colouring.

11. District Inspectors' Samples

Twenty-seven specimens were examined and these included: Dust particles for size and composition; cans of chopped ham for general condition; crumpets showing excessive mould growth; a leech identified as the common horse leech; an insect identified as a cockroach; insects identified as parasitic mites and carpet beetles; an insect identified as the brown banded cockroach; beetles identified as a soldier beetle, the wharf borer and plaster beetles; a fungus identified as the dry rot fungus, *Merulius Lacrymans*; flying insects shown to be non-biting midges of the family Chironomidae; flea larvae shown to be cat flea larvae and other flies and insects identified as *Ptinus tectus*, *Ptinus fur*, *Drosophila* Dor beetles, and flying ants. The latter were submitted in November and it is most unusual for such ants to swarm so late in the year, although weather was mild.

12. University of Bristol

The Department of Bacteriology required the examination of a water, agar and amino acids for traces of copper.

13. Public Health Laboratory Service

Three samples of milk were examined for penicillin or other inhibitors but without result.

14. Toys (Safety) Regulations, 1967

A scare occurred just before Christmas in relation to samples of painted wooden toys submitted by the Weights and Measures Department under the Consumer Protection Toys (Safety) Regulations, 1967, which became operative on 1st November and wherein a limit was laid down for a maximum amount of lead permissible in

the paint films of such toys. A pop-gun and a toy duck were cleared but two specimens of toy clowns on a trolley base, one from Czechoslovakia and the other from Russia, both had excessive lead in some part of their colourings. Both were withdrawn from sale and in one case refunds were made by the retailers.

The local authority had every right under the 1967 legislation to prosecute for these offences, but in view of the brief time of operation of the Regulations, i.e. 1st November, 1967, it was thought wise to withhold the big stick and trust that publicity and a warning would serve to ensure that manufacturers were well aware of their obligations. It is very probable that any contraventions in 1968 will result in prosecution. The Regulations also propose that as from 1st October, 1968, the lead limit will be reduced from 11,000 ppm to 5,000 ppm and further that limits will be imposed for arsenic at a maximum of 250 ppm and for soluble compounds of barium, chromium, cadmium and antimony also at 250 ppm maximum. Analytically this will impose a considerable burden upon the laboratory concerned with the enforcement of the Regulation. Thus a toy having four different colours, a not uncommon occurrence, will require no less than 24 determinations to cover the six metals. In this laboratory I hope that spectrographic techniques will help to minimise this burden.

15. Toys—Examination of Teddy Bears

A powdered filling from a teddy bear was found to consist entirely of urea formaldehyde. Dr. E. C. Wood, Norwich, first reported this problem some two years ago. It was considered that this substance, being in a very finely powdered form, could prove potentially dangerous if inhaled by young children. I reported upon this subject to the November meeting of the Health Committee and press and television gave considerable publicity to the matter. It was subsequently learned that the teddy bears were of Polish origin. The Home Office and the Customs and Excise Authority were much interested and I learned that the latter had ordered the destruction of a large number of these toys over a year ago and presumably upon Dr. Wood's objections to the material used.

The wide publicity given to the problem brought many telephone enquiries from colleagues and others throughout the country. This laboratory received forty-four of the suspect toys but all proved to be free from the urea formaldehyde filling. The filling materials were mainly sawdust, wood wool and shaving.

REPORT OF THE WORK FOR THE COUNTY OF GLOUCESTER

Summary of Examinations

Milks	...	...	...	...	1,640
Food and Drugs	...	...	...	...	754
Waters, Swimming Baths and Effluents	...	...	...	...	80
Fertilisers and Feeding Stuffs	...	...	...	...	306
Gas Chromatography	...	...	...	...	351
National Pesticide Scheme	...	...	...	...	12
Miscellaneous	...	...	...	...	83
					<hr/>
					3,226
					<hr/>

Air Pollution—Lead Peroxide ...	...	23
Air Pollution—Deposit Gauges ...	...	22
Spectrographic analyses ...	...	52
Chlorination ...	...	99
Pharmacy and Poisons ...	...	12
Merchandise Marks Act ...	...	10
		<hr/> 218 <hr/>

AIR POLLUTION

	<i>Bristol</i>	<i>Gloucester County</i>	<i>Gloucester City</i>
Lead Peroxide ...	60	23	12
Deposit Gauges ...	66	22	12
Smoke Recordings (City) ...	640	—	—
Smoke Recordings (Miscellaneous)	559	—	—
	<hr/> 1,325 <hr/>	<hr/> 45 <hr/>	<hr/> 24 <hr/>

The first three items in the table above involve the Department in a considerable amount of analytical work, whereas in the Miscellaneous Smoke Recordings, totalling 559, are smoke stain papers submitted for checking stain intensities. These have come from one school (Monks Park) and the Chief Public Health Inspector's Office at St. Clement's House and also from the Stroud, Dursley and Sodbury Authorities. The latter, however, was only operative for the first quarter of the year.

The City Survey

The Waterworks site was abandoned at the end of May 1966 when the building was sold. The apparatus at the City Centre is now sited on the roof of the C.W.S. building. It is regretted that at all four City sites there has been a marked depreciation in conditions. At the C.W.S. site the deposition, 125 tons for 11 months, is certainly worse than 1966 figures, but showed marked similarity with the 1964 and 1965 levels.

At Shaftesbury Crusade the 157 tons in 11 months is the worst picture since 1963, whilst the Zoo deposition has reverted to 1964 and 1965 levels. At this site there was in June the remarkable deposition of 32 tons per square mile in the month, which, however, strongly suggested that the gauge had been tampered with. The deposition of 91 tons was thus for a 10 months' period, since very heavy rainfall in October caused all four gauges to overflow, thus rendering observations null and void for that month. The deposition of 121 tons in 11 months was the heaviest since 1954. There was no obvious explanation for the general pollution rise in the City area. Certainly the rainfall figures were not significantly different and apart from very heavy rain in September and particularly October, the year was relatively dry.

Sulphur pollution on the other hand showed very definite improvement at all sites and notably so at the Zoo and Blaise. The Zoo level was 0.51 mgms of SO₃ per 100 sq. cm. per day, the best figure in the years 1954–1967, and Blaise at 0.59, again the best figure, apart from the 1961 for the 14 years' observations.

The Avonmouth Survey

The Green Splot site represent conditions in the area of the Chittening Estate to the north east of the National Smelting Works and Fison's fertiliser factory and within

one mile of the Carbon Black works. Only sulphur pollution was assessed and at 0.84 was the lowest figure yet recorded. The degree of pollution was something between conditions in the City and the Zoo and Blaise sites.

The Thornbury Survey

Sulphur pollution levels at the two farms were at their lowest since 1959 for the Waling site and since 1962 for the Brynleaze area.

Total deposited matter at both sites was of the order of 90 tons, which is about the level of recent years. The rainfall figures have not shown much fluctuation from the 20 to 25 inches per annum.

The Gloucester City Survey

As with Bristol City the total deposition figure at 127 tons was notably higher than of recent years and, indeed, is the highest figure recorded since 1958. The rainfall at 27.4 inches was somewhat heavier than recent years and partially explains the higher deposition. Again as with Bristol City the sulphur pollution level continued to improve and showed the best figures since 1962.

The Central Health Clinic

Somewhat surprisingly in the light of general City conditions there has been a significant improvement in the total deposition figure which at 160 tons for 11 months was the best figure since 1961. Rainfall was in accord with the general City level and it should be noted that at 160 tons the Clinic pollution level was much the same as conditions at Shaftesbury Crusade.

OTHER ACTIVITIES

It is inevitable that in a busy organisation there are many calls upon one's time besides the business of running the day-to-day laboratory work. The diary is always an intriguing source of the happenings of the year.

Thus nineteen prosecutions were implemented relating to foreign bodies in food, penicillin in milk, watering and fat deficiencies in milk, feeding stuffs discrepancies and a problem relating to a sewage discharge. In fourteen instances a plea of guilty was entered and therefore my attendance at court was required on five occasions only.

Nine meetings were held as working lunches under the direction of Dr. Markham to discuss with doctors attached to local industries problems of industrial medicine and occupational health. Those attending these meetings have the task of perusing specific journals and bringing to the meeting any matters of common interest. Mrs. M. Harris, my secretary, has given valuable help in providing reports of these meetings and for this and her cheerful and valuable assistance in the office at the laboratory I am extremely grateful.

Twenty-eight lectures were given during the year, 21 of these by your analyst and the remainder by senior members of staff. As in previous years more specialised lectures were given to D.P.H. students and to second and fourth year trainee public health inspectors. More general talks on the work of the Department were given to the following organisations: The Lodge Causeway T.G.; the Stockwood Young Wives' Group; the National Federation of Business and Professional Women; the Corsham, Wilts, T.G.; the Midland Bank Wives' Luncheon Club; the Chemistry

Students' Association of Bath University; the Nursery Nurses of Stoke Lodge; the St. Albans Young Wives' Group; the Young Wives' Club, Henleaze; the St. Andrew's T.G.; the Westbury-on-Trym Young Conservatives' Association and the Staple Hill Residents' Association. Messrs. Dembrey, Fisher and Taylor assisted with the D.P.H. lectures and Mr. Dickes gave two special lectures in London on Thin Layer Chromatography techniques in relation to analyses of food additives.

Visitors to the laboratory included second year public health trainees; boys from the Grammar School; girls from Badminton School and girls from the Rose Green High School. These groups were given conducted tours of the laboratories. Individual visitors whom we had much pleasure in welcoming to the Department included Dr. Herat from Ceylon, Miss Darley from the Southampton Analyst's Department; Dr. Green of the Bristol Technical College; Dr. Felici from Venezuela and Mr. P. Robinson of B.O.C.M.

I was privileged to attend several meetings of the Association of Public Analysts mainly in London, but with one meeting in October in Stafford at which I presided. This was also the occasion of the retirement of Mr. Houlbrooke, the Analyst for the County of Staffordshire. I likewise presided at a meeting of the Association to discuss and survey the pesticide scheme in which many local authorities are participating.

I attended five meetings of the Examinations Board of the Royal Institute of Chemistry, which early in the year discussed the revision of examination conditions for the Food, Drugs and Waters Diploma, and subsequently reviewed the examiners' questions and finally sat in assessment of the October results of the fourteen candidates who took the six-day examination. As Moderator I assisted in the marking of the papers.

I have held the Vice-Presidency of the Association for nearly two years and in May 1968 I shall be nominated as President, a post normally held for two years. It is my hope that the annual general meeting of the Association will be held in Bristol in May 1969.

There were the usual quarterly meetings of the Gloucester Weights and Measures Committee and two meetings of the Scientific Sub-committee before it was disbanded when I was required to report to full Health Committee.

The members of the Zone 3 laboratories under the Pesticide Scheme had a very successful meeting in Bristol in September and developing from this it is hoped to interest other Zone laboratories in meeting and working together on problems of mutual interest to the Association of Public Analysts. The Zone 3 laboratories propose to meet in Taunton in March 1968.

A most helpful meeting was held with the Bristol Water Company in October to discuss matters of safety management in waterworks practice, and there was the usual interest in problems in air pollution.

As a result of the Medical Officer of Health's interest in a vitamin C in blood survey of old people, a meeting took place with officials of Roche products and subsequently Mr. Taylor visited Welwyn Garden City for a few days to see something of the Roche approach and methods for vitamin C. It is hoped to start a survey of some 100 people in January, 1968.

SPECIAL TOPICS

1. Calcium or Sodium Cyclamates are salts of cyclo-hexane sulphamic acid

Cyclamates as the sodium and calcium salts have been permitted in soft drinks since 1964 and the Ministry of Food now proposes to permit the unrestricted use

of cyclamates in all foods, except ice-cream, from 1st December, 1967. Nevertheless, the Food Additives and Contaminants Committee have acknowledged that cyclohexylamine, a metabolite of cyclamic acid, is toxic and that some 20 per cent of the populace may so metabolise cyclohexylamine.

Little really appears to be known of this substance, although it is admitted that another possible metabolite—dicyclohexylamine—has definite carcinogenic properties. It is said that the U.S.S.R. has banned cyclamates for this reason, but it appears more likely that the reason for the ban is simply that sugar consumption in Russia is too low.

The acceptance of cyclamates in this country seems to be primarily based on U.S.A. experience where cyclamates have been used in dietary foods for eight years, perhaps indicative of a risk which is vanishingly small. The Government's case rests on the decision not to permit more than 50 mg. per kilogram of body weight, but it would not be difficult for a child to exceed this intake from soft drinks alone during, say, the summer months. There is also the tacit acceptance of a risk in that cyclamates are banned in ice-cream, again to avoid high intake in children.

The problem will not be helped if such foods as jam, breakfast cereals, confectionery and cakes are permitted the use of cyclamates, as now it appears that the Government has looked further at the problem but has reaffirmed its decision to permit such use as from 1st December, 1967. There would certainly seem to be a case for further study before widespread use is permitted.

It is interesting to note that the examination of a number of soft drinks prepared by reputable manufacturers have recently been examined in the laboratory here and whilst saccharin continues to be favoured, the use of cyclamates is either nil or minimal. It thus appears that some manufacturers are imposing their own voluntary ban or limitation of the use of this sweetener. One further point should be made. Apart from sweetening properties cyclamates are stated to be more resistant to heat than saccharin and also there may be some synergistic action, together with an ability to stabilise essential oils, particularly in fruit drinks.

2. Metallic contamination of foodstuffs submitted under the Pesticide Monitoring Scheme

We have recently completed the first year's survey of some 43 samples taken under the Pesticide Scheme.

D. J. Taylor, of this laboratory, having studied methods for mercury, lead, copper and arsenic, decided to treat every one of the samples submitted for these metals.

There are a few comments which can be made on the results:

(a) Mercury: Three samples, a lard, breakfast cereal and an untreated milk gave 0.259, 0.207 and 0.740 ppm respectively. The milk figure in particular is remarkable. It could be explained by a broken thermometer or treatment of the cows with mercurials. A second sample allegedly from the same source gave a "normal" figure.

(b) The same lard (with 0.259 ppm of mercury) also had a lead figure of 1.13 ppm, whilst a lettuce showed 1.83 ppm. The lettuce figure might possibly be explained by air pollution, from lead fuels, although we have no proof of this.

(c) Copper: The breakfast cereal, besides being high in Hg. and Pb. contents, had a figure for copper of 7.1 ppm, and 6.28 ppm of copper was found in bread. Indeed, breads generally had significant copper contents.

(d) Arsenic: None of these results would seem to be other than “normal” for the foods involved.

3. Cobalt in Beer

Cobalt salts in the form probably as the sulphate or other salts are stated to have been added to beer in Canada and the United States as a foam improver or stabiliser, and also it is alleged to overcome the effect of detergent residues left on glasses after poor rinsing. The Brewers’ Journal of May 1967 referred to the original report in August 1966, which gave information of a mysterious heart disease affecting beer drinkers. 20 people died in Quebec and another 17 in the mid-west of the United States. Cobalt came under suspicion and “Medical News” of the 20th October, 1967, stated that the “essential factor in the Quebec outbreak was the addition of cobalt sulphate. Most of the drinkers who died had consumed more than 10 pints of beer per day and in some instances 30 pints and more.”

The amounts of cobalt added are very conflicting. Thus in Quebec it would appear that ten times the amount of cobalt was used as compared with the Montreal brewery which had no similar outbreak. Cases occurred within a month of cobalt added to Quebec City beer and there were no new cases within a month of its withdrawal.

Dr. Morin, Director of Quebec Institute of Cardiology at Laval University, criticised the Food and Drug Directorate for originally authorising the use of cobalt.

The American Food and Drug Administration approved the use of cobalt salts in 1961 and has now suggested that such use be discontinued and American breweries voluntarily stopped the practice when cobalt salts became suspect in the Canadian deaths. Indeed, 16 beer drinkers had earlier died in Omaha, Nebraska, with symptoms identical with those of the Canadian victims.

As far as the Bristol laboratory is concerned, we first examined six informal samples of beer in July 1967, and found cobalt in two draught beers to the extent of 0.75 and 0.5 ppm as cobalt. The samples were taken in Gloucester City. I then asked the Bristol City inspectors to take a wide cross-section of beers on sale in the City. The thirteen bottled beers submitted on the 8th August, included bottled versions of the supplies of draught beers in which cobalt had been found. All thirteen samples of these beers were free from cobalt. This was followed by a further thirteen samples of draught beer submitted on the 23rd August and again all proved free from cobalt. No further samples have been examined since.

4. Betaine in Soft Drinks as a means of assessing fruit content

A critical study was made on 10 orange drinks using the Betaine method of W. M. Lewis as published in the Journal of the Society of Food and Agriculture, Vol. 17, No. 7. The following results were obtained:

<i>No. of Samples</i>	<i>Description</i>	<i>% Orange Juice Betaine Method</i>	<i>Mineral Analysis % P or K fig. used</i>
WD.595	Orange drink	11.5	16.1 P
596	Orange drink	13.8	17.3 P
597	Orange drink	16.8	16.1 K
598	Whole orange drink ...	10.0	19.1 K
197	Jaffa orange drink (i) ...	7.5	19.2 K
	(ii)	7.5	19.2
198	Jaffa orange drink (i) ...	5.9	5.6 K
	(ii)	5.0	

203	Orange drink ...	...	13.1	16.5	K
204	Orange drink ...	...	12.2	14.1	P
205	Orange drink ...	...	20.2	13.1	P
221	Quick orange squash ...	...	110.0	102.3	K
	(dilute eight times)				

The following observations were made:

- (a) Duplication by the Betaine method appeared to be reasonable.
- (b) Brands sampled twice were in reasonable agreement having regard to manufacturing variations.
- (c) Mineral analyses were conducted in accordance with methods in "Food," August 1954.
- (d) Ash figures were disregarded as unreliable.
- (e) Where the "P" figure was realistic it was used but in most cases gave high results, probably due to addition of phosphate.
- (f) Where it appeared that phosphate had been added the "K" figure was used.
- (g) Having regard to the requirement of a minimum of 10 per cent fruit juice in the drinks examined, the betaine figures appear to be more realistic.
- (h) Samples VD.197 and 198 both appeared to have added phosphate. In VD.197 mineral analysis suggests 19.2 orange juice and in VD.198 only 5 per cent based on "K" values. Betaine figures are 7.5 and 5.5 per cent respectively. That is significantly less than the minimum 10 per cent requirement.

5. A Survey of Fruits and Vegetables for Dithiocarbamate Residues

This work was carried out by J. S. Pagington of the Imperial Tobacco Co. Ltd., Bristol, who was a sandwich course student in this Department for the six months' period from 1st July, 1967. Essentially the method was based on the TLC technique for distinguishing the four common dithiocarbamates. The work is the subject of a paper for the Journal of the Association of Public Analysts. It will suffice to give the results and the discussion relating to the work:

155 samples were examined and of these 87 contained zineb and one contained thiram. Zineb was the most common dithiocarbamate in use, although thiram is known to be used on the strawberry, blackcurrant, raspberry and onion, which have yet to be examined.

The incidence of dithiocarbamate in apples, celery and lettuces was small, but most samples of mushrooms, pears and tomatoes, gave a residue. Apples and pears yielded comparatively small amounts of zineb in contrast to mushrooms and tomatoes where results were as high as 16 and 11 ppm respectively. Twelve samples of mushroom and one of tomato exceeded 7 ppm of zineb and the lettuce sample contained 10 ppm thiram.

The mushroom samples were all English and it was shown that most of the zineb was in the cap peel.

Tomato samples were Spanish or Canary Island and pears were either English or Italian. Maneb and ziram residues have not been found. It is hoped to continue the survey in 1968.

6. The detection of Amphetamine in Urine by Thin Layer Chromatography

This work of Messrs. G. J. Dickes and A. C. Ellis was published in the Journal of the Association of Public Analysts in December, 1967. Mr. Dickes is a senior member of this staff and Mr. Ellis is with the Imperial Tobacco Co. Ltd., Bristol, and was a sandwich course student as from 1st January, 1967, for six months. In the paper a simple thin layer chromatographic method was described. Hexan-2:5 dione and p.dimethylaminobenzaldehyde were used as the detecting agents, thereby effecting an increase in specificity over existing TLC methods.

Seventy urine samples were examined and no interference from any co-extracted natural or synthetic compound was observed. Positive results were obtained in samples where the subjects had previously denied taking a stimulant. One subject had probably taken at least 40 milligram.

A human subject took a normal therapeutic dose of 10 mg. of amphetamine sulphate and this was detected in the 24-hour sample.

Since abuse of this drug would probably mean the consumption of amounts greater than this, the method developed should be sufficiently sensitive provided the urine is not naturally alkaline when excretion of the drug is slow.

HEALTH CENTRES

F. J. Jones

(First Assistant, Administration)

During 1967 a third health centre, at Stockwood, was opened; reference will be made to this later in the report. The other two health centres, William Budd and St. George, carried on as in previous years, although the statistics published will demonstrate an increase in the work of both centres. All three health centres continued to evoke much interest amongst doctors, architects and councillors alike, and a very considerable number of visits was arranged. This ultimately became such a problem, because the programme of visits was actively interfering with the work of the health centres, that the Health Committee decided to limit the official visits to one per month with parties of not more than six.

Considerable thought was given to the question of financial arrangements for doctors practising in health centres, following the publication of circulars 7/67 and ECL 30/67. It is generally felt that the circulars give no detailed guidance on the charges and there were opposing opinions, particularly over the charges for ancillary staffs and general services. These questions had not been resolved at the end of the year, with the result that William Budd and Stockwood Health Centres were operating without any formal agreement between the Local Health Authority and the Bristol Executive Council.

During the year final plans were agreed for the building of a fourth health centre at Wigton Crescent, Southmead. This will be financed from the proceeds of the sale of Southmead Clinic to the Regional Hospital Board and building will commence in 1968. Part of the balance of the proceeds will provide a further purpose-built health centre in another part of the City, and the remainder will go towards the cost of adapting Bedminster Clinic prior to its redesignation as a health centre. During the year the Health Committee decided, in view of the present financial climate in the county, to defer for one year the provision of two more health centres scheduled for commencement in the financial year 1968/69.

The Bristol Joint Advisory Committee for Health Centres was established during the year, replacing the existing Joint Advisory Committees for the individual health centres. Its constitution is as follows: three representatives each from the Local Medical Committee, Bristol Executive Council, Local Health Authority; one representative of the Local Dental Committee and of the House Committees of the existing health centres; the Regional Hospital Board and the Board of Governors of the Teaching Hospitals have been invited to nominate representatives. The task of this Committee will be to consider the policy of health centre development in Bristol and to make recommendations as necessary to the parent bodies of its constituent members. The new Joint Advisory Committee met for the first time in November 1967, and has given approval to the City's development plan for health centres in the immediate future.

WILLIAM BUDD HEALTH CENTRE

During the year further internal decoration and improvement was carried out, and despite its age and the poverty of its design, obviously because of prefabrication, the

health centre now presents an extremely pleasing appearance and still attracts many visitors. Additional car parking space has been laid out and regretfully, because of intermittent vandalism, high railings have been erected along the front of the site.

In 1965 the clerical staff establishment had been revised :

- 1 Clerical Assistant (in charge of office)
- 1 Shorthand-Typist/Secretary
- 1 General Clerk

The result was not so successful as had been hoped for and during 1967 the establishment reverted to its original form :

- 2 Shorthand-Typist/Secretaries
- 1 General Clerk.

Otherwise there were no major staff changes either amongst the doctors or in the ancillary staff during the year. However, though it occurred in January 1968 as these notes were being compiled, it is only right that the sad and untimely death of Dr. R. Y. Carter should be mentioned now. Dr. Carter was one of the original doctors to go into the William Budd Health Centre when it opened in 1952 and had worked there ever since. A man admired and respected by patients and colleagues alike, he will be greatly missed. We record his death with great regret.

The annual figures for attendances at surgeries and treatments showed an over-all increase for the year.

WILLIAM BUDD HEALTH CENTRE
ATTENDANCES AT SURGERIES — 1967

	PRACTICE							
	"A"	"B"	"C"	"D"	"E"	TOTAL	A.M.	P.M.
<i>1st Quarter</i>								
Total attendances	4,079	737	2,447	1,633	2,095	10,991	7,410	3,581
Average per week	314	57	188	126	161	845	570	275
% of total	37·1	6·7	22·3	14·9	19·0	100·0	67·4	32·6
<i>2nd Quarter</i>								
Total attendances	3,859	706	2,534	1,734	2,127	10,960	7,451	3,509
Average per week	297	54	195	133	164	843	573	270
% of total	35·2	6·4	23·1	15·9	19·4	100·0	68·0	32·0
<i>3rd Quarter</i>								
Total attendances	3,612	751	2,528	1,725	1,995	10,611	7,181	3,430
Average per week	278	58	194	133	153	816	552	264
% of total	34·0	7·1	23·8	16·3	18·8	100·0	67·7	32·3
<i>4th Quarter</i>								
Total attendances	4,253	685	2,729	1,800	2,228	11,695	7,873	3,822
Average per week	327	53	210	138	171	900	606	294
% of total	36·4	5·9	23·3	15·4	19·1	100·0	67·3	32·7
<i>Total for Year 1967</i>								
Total attendances	15,803	2,879	10,238	6,892	8,445	44,257	29,915	14,342
Average per week	304	55	199	133	162	851	575	276
% of total	35·7	6·5	23·1	15·6	19·1	100·0	67·6	32·4
<i>Total for Year 1966</i>								
Total attendances	14,830	2,812	9,316	6,644	7,571	41,173	27,249	13,924
Average per week	285	54	179	128	146	792	524	268
% of total	36·0	6·8	22·6	16·1	18·4	100·0	66·2	33·8

WILLIAM BUDD HEALTH CENTRE

TREATMENTS — 1967

<i>Patients</i>		<i>1st Quarter</i>	<i>2nd Quarter</i>	<i>3rd Quarter</i>	<i>4th Quarter</i>	<i>TOTAL</i>	<i>Weekly Average</i>
Referred by G.P. ...	...	2,804	2,752	2,452	2,425	10,433	201
Not seen by G.P. ...	...	2,167	2,245	2,113	1,736	8,261	159
Total patients ...	...	4,971	4,997	4,565	4,161	18,694	359
% after 5 p.m. ...	...	38%	37%	38%	37%	37%	37%
<i>Treatments</i>							
1. Dressings ...	...	1,681	1,911	1,810	1,616	7,018	135
2. Minor operations ...	...	27	34	15	40	116	2
3. Eye treatment ...	...	23	33	20	35	111	2
4. E.N.T. treatment ...	...	317	224	186	249	976	19
5. Antibiotics ...	...	270	244	307	227	1,048	20
6. Other injections ...	...	461	447	434	364	1,706	33
7. Cautery ...	...	3	9	7	7	26	1
8. Other* ...	...	973	88	638	458	2,957	59

* includes oral polio immunisation

The nurses also acted as chaperones on 1,565 occasions

Investigations

A. Haemoglobin ...	...	403	387	384	357	1,531	29
B. E.S.R. ...	...	45	40	44	43	172	3
C. E.C.G. ...	...	38	33	32	38	141	3
D. Urine ...	...	455	452	409	412	1,728	33

Specimens sent to laboratory

a. Blood ...	...	75	62	50	50	237	5
b. Ear swabs ...	...	22	15	18	47	102	2
c. N.T. swabs ...	...	30	33	20	40	123	2
d. Urine ...	...	108	80	99	156	443	9
e. Other ...	...	65	131	62	43	301	6

ST. GEORGE HEALTH CENTRE

Mr. W. B. Fletcher writes:

General

There was no major change at the health centre during the year until the autumn, when a nearby practice closed and rather more than 2,000 additional patients were transferred to the care of the doctors at the centre. The bulk of the increase went to the larger practice, who eventually made arrangements for a further doctor to join them and from the 1st January, 1968, there will be one six-handed practice and one three-handed practice operating from the centre.

Attendances at surgeries

The figures shown in Table 1 are in comparable form with previous years, and having regard to the increased number at risk, show little change. It is known from two sample surveys that due to the use of family folders, there is some under-recording of surgery attendances, probably of the order of 10 per cent. Excluded from the figures in Table 1 are attendances at ante-natal, post-natal, child welfare and other special clinics run by the general practitioners, but taking these extra items into account it is estimated that for each patient on the list there are about 3½ surgery contacts per patient per annum.

Distribution of patients throughout the week (Table 2) shows slightly less variation than in previous years, but the tendency to start high on Monday with a

gradual decline towards the end of the week is still apparent as it appears to be in most other published figures.

Appointments

As mentioned in last year's report, the number of patients attending by appointment was smaller than originally hoped. A study was made of the attendances and facilities for obtaining appointments, as a result of which the larger practice increased the time available for appointments and towards the end of the year there was a reversal of the trend. From the lowest appointment rate of 63 per cent in the second quarter of the year there was a welcome rise to 73 per cent in the last quarter of the year. A study at the Stockwood Health Centre showed that more than a quarter of new cases attending morning surgeries requested appointments after the sessions had commenced. Similar requests at St. George are now receiving late appointments for morning surgeries, which previously would not have been available to them.

Treatments

There was some slight increase in the work of the treatment room where haemoglobin estimations were twice as numerous as in the previous year. It should be noted that various investigations in connection with ante-natal clinics are excluded from Table 3.

Home visits

There was a welcome reduction in the number of home visits—more marked in the larger practice. As will be seen from Table 4, the reduction was greater among female patients in practice "A"; in 1965 the doctors in this practice paid 150 home visits for every 100 females at risk and by 1967 had reduced this number by more than 25 per cent to 111. A reduction of more than 20 per cent in home visits to males over the same period was also achieved.

For the first time since home visits were recorded in 1965, the number fell below 1 per patient per annum. If in addition one takes into account the surgery visits and clinic attendances the total contacts in 1967 were calculated at slightly less than $4\frac{1}{2}$ per patient at risk.

Age/Sex Distribution

The figures shown in Table 5 relate to the distribution of patients at the end of 1967, but the rates covering home visits are based on the average throughout the year.

The increase in patients occurring during the last quarter of the year raised the proportion of those over 65 by almost 1 per cent. In the larger practice the proportion of elderly patients increased more steeply from 11.6 per cent in 1966 to 13.3 per cent in 1967.

TABLE 1

ST. GEORGE HEALTH CENTRE
ATTENDANCE AT SURGERIES — 1967

		MORNING			EVENING			TOTALS		
		Total Attend-ances	% by appoint-ment	Average no. per Session	Total Attend-ances	% by appoint-ment	Average no. per Session	Total Attend-ances	% by appoint-ment	Average no. per Session
<i>Practice 'A'</i>										
1st quarter ...	...	4,608	66	21.9	4,070	69	22.2	8,678	67	22.1
2nd quarter ...	...	4,354	62	24.3	3,817	64	24.9	8,171	63	24.6
3rd quarter ...	...	4,041	64	22.7	3,462	67	22.8	7,503	65	22.7
4th quarter ...	...	4,926	71	20.4	4,096	74	24.4	9,022	73	22.0
Totals	...	17,929	66	22.2	15,445	69	23.0	33,374	67	22.8
<i>Practice 'B'</i>										
1st quarter ...	...	2,462	66	17.7	1,788	72	18.2	4,250	69	17.9
2nd quarter ...	...	2,212	68	15.7	1,833	70	18.3	4,045	69	16.8
3rd quarter ...	...	2,090	67	14.8	1,695	72	17.0	3,785	69	15.7
4th quarter ...	...	2,460	64	17.8	1,812	69	18.7	4,272	66	18.2
Totals	...	9,224	66	16.5	7,128	71	18.0	16,352	68	17.1
<i>BOTH PRACTICES</i>										
Total attendances ...	...	27,153	66	—	22,573	69	—	49,726	67	—
Weekly averages ...	...	522	—	—	434	—	—	956	—	—

TABLE 2

ST. GEORGE HEALTH CENTRE
ATTENDANCE BY DAY OF WEEK — 1967

Attendances	MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY		SATURDAY		WHOLE WEEK	
	Total	% by Appt.	Total	% by Appt.	Total	% by Appt.	Total	% by Appt.	Total	% by Appt.	Total	% by Appt.	Total	% by Appt.
<i>PRACTICE 'A'</i>														
Mornings ...	3,567	60	3,361	68	3,421	67	2,958	71	2,498	70	2,124	60	17,929	66
Evenings ...	3,382	66	3,176	69	3,227	68	3,025	69	2,635	73	—	—	15,445	69
Daily total ...	6,949	63	6,537	68	6,648	68	5,983	70	5,133	72	2,124	60	33,374	67
<i>Averages</i>														
Mornings ...	74	—	66	—	66	—	57	—	49	—	41	—	59	—
Evenings ...	70	—	62	—	62	—	58	—	52	—	—	—	61	—
<i>PRACTICE 'B'</i>														
Mornings ...	1,826	62	1,686	71	1,761	62	1,725	70	1,589	72	637	53	9,224	66
Evenings ...	1,812	66	1,656	75	—	—	1,976	72	1,684	69	—	—	7,128	71
Daily total ...	3,638	64	3,342	73	1,761	62	3,701	71	3,273	71	637	53	16,352	68
<i>Averages</i>														
Mornings ...	38	—	33	—	34	—	33	—	31	—	12	—	30	—
Evenings ...	38	—	35	—	—	—	38	—	33	—	—	—	36	—

TABLE 3

ST. GEORGE HEALTH CENTRE TREATMENTS FOR 1967

CATEGORY					Practice 'A'	Practice 'B'	Totals	Average per week
<i>Patients</i>								
i.	Referred by G.P.	...	...	...	4,995	3,338	8,333	160
ii.	Not seen by G.P.	...	...	...	775	406	1,181	23
iii.	Total patients	...	...	...	5,770	3,744	9,514	183
% of patients after 5 p.m.					37%	32%	35%	
<i>Treatments</i>								
1.	Dressings	...	...	...	1,081	472	1,553	30
2.	Minor operations	...	...	...	55	70	125	2
3.	Eye treatment	...	...	...	16	9	25	1
4.	E.N.T. treatment	...	...	...	444	266	710	14
5.	Antibiotics	...	...	...	74	217	294	6
6.	Other injections	...	...	...	836	525	1,361	26
7.	Cautery	...	...	...	4	13	17	1
8.	*Other	...	...	...	531	306	837	16
* includes oral polio immunisation								
The nurses also acted as chaperones on 458 occasions								
<i>Investigations (excluding A/Natal)</i>								
A.	Haemoglobin	...	...	...	892	429	1,321	25
B.	E.S.R.	...	...	...	179	54	233	4
C.	E.C.G.	...	...	...	103	119	222	4
D.	Urine	...	...	...	351	965	1,316	25
D1.	No. in D referred to Path. Lab.	...	...	...	2	1	3	—
<i>Specimens Sent</i>								
a.	Blood	...	...	...	185	194	379	7
b.	Ear swabs	...	...	...	5	4	9	1
c.	N.T. swabs	...	...	...	39	27	66	1
d.	Urines	...	...	...	620	183	803	15
e.	Other	...	...	...	133	74	207	4

TABLE 4

**ST. GEORGE HEALTH CENTRE
ANALYSIS OF RETURNS COVERING HOME VISITS — 1965-1967**

Age Sex	INITIAL VISITS				RE-VISITS				REPEAT VISITS				TOTAL VISITS	
	Under 65		65+		Under 65		65+		Under 65		65+			
	M	F	M	F	M	F	M	F	M	F	M	F		
PRACTICE 'A' No. of visits Per patient 65+ on list	1967	1,922	2,386	536	1,006	573	936	253	427	228	170	1,016	2,245	11,698
	1966	2,202	2,751	540	978	700	1,177	342	504	261	140	1,099	2,622	13,316
	1965	1,999	2,471	363	697	1,160	1,648	308	509	181	387	1,241	3,236	14,200
	1967	—	—	0.9	1.0	—	—	0.4	0.4	—	—	1.8	2.3	—
	1966	—	—	1.1	1.1	—	—	0.7	0.6	—	—	2.2	3.1	—
1965	—	—	0.8	0.8	—	—	—	0.7	0.6	—	—	2.7	3.8	—
PRACTICE 'B' No. of visits Per patient 65+ on list	1967	880	1,129	422	692	332	625	508	649	14	31	311	657	6,250
	1966	1,120	1,346	422	690	363	714	595	797	22	37	318	805	7,229
	1965	1,069	1,269	338	540	510	853	644	778	16	36	309	746	7,108
	1967	—	—	1.0	1.0	—	—	1.1	1.0	—	—	0.7	1.0	—
	1966	—	—	1.1	1.2	—	—	1.5	1.3	—	—	0.8	1.4	—
1965	—	—	0.9	0.9	—	—	—	1.7	1.3	—	—	0.8	1.2	—

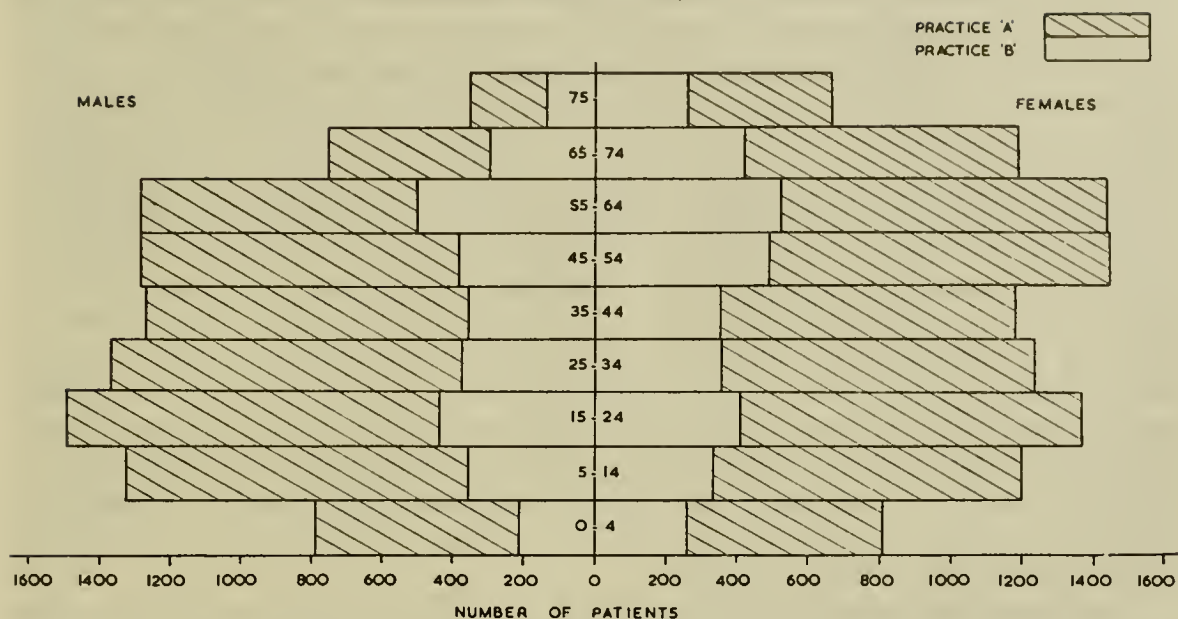
VISITS (PER ANNUM) PER 100 PATIENTS ON LIST

BOTH PRACTICES	1967				1966				1965			
	Males		Females		Males		Females		Males		Females	
	M	F	M	F	M	F	M	F	M	F	M	F
Under 65 years	48	64	59	77	64	88	64	88
65 years and over	301	348	375	444	382	450	382	450
All ages	73	111	91	133	96	146	96	146
PRACTICE 'A' ONLY — all ages	71	111	87	128	93	150	93	150
PRACTICE 'B' ONLY — all ages	84	116	100	143	101	137	101	137

ST. GEORGE HEALTH CENTRE

AGE AND SEX DISTRIBUTION

20,444 PATIENTS



STOCKWOOD HEALTH CENTRE

Bristol's third health centre at Hollway Road, Stockwood, commenced work in September 1967. The official opening ceremony was performed on 24th November, 1967, by the Rt. Rev. Mervyn Stockwood, D.D., the Lord Bishop of Southwark and a former Chairman of the Health Committee.

Seven doctors from four practices, caring for about 7,000 patients, hold surgeries in the health centre. All the doctors concerned also see patients at surgeries in neighbouring parts of Bristol, and as in the other two health centres the principle of "joint use" of all available accommodation by the doctors and the L.H.A. is fully accepted. Thus the waiting room and most of the consulting rooms are in use for the greater part of the day. Dr. P. N. Dixon writes:

Accommodation

There is one large waiting room which can be divided into two by means of floor-to-ceiling curtains. Opening off this waiting room are three consulting rooms, each with its own examination room. One of the consulting rooms also communicates with the ante-natal changing room, one with the main office, while the third also has a door to the outside. The main office is fitted with specially-designed covered filing trays for the medical records, and has ample storage space. The Sister-in-Charge has her own office, and the other members of the nursing staff share a room with three desks. There is a comfortable common room where all members of the staff can meet each other and discuss matters of mutual interest. All major rooms, including the well-equipped treatment room, are connected by an efficient internal telephonic communication system.

Staff

The opening of a new health centre provided an opportunity for the introduction of an experimental pattern of nursing, the Community Nurse Team. The principle

involved is that the bulk of the home nursing is done by State Enrolled Nurses under the general supervision of Community Nurses who have both Health Visiting and District Nursing qualifications and who undertake, in addition to the full range of advisory and educational work of the Health Visitor, the few district nursing tasks which are beyond the skill and training of the State Enrolled Nurse. To reach maximum effectiveness such a team has to co-operate fully with the family doctor, and at Stockwood a team of two Community Nurses, one of whom was designated as Sister-in-Charge of the Health Centre, and two State Enrolled Nurses was attached to the 7,000 or so patients who look to the doctors at the Health Centre for their medical care. It was intended that members of the team would also assist the doctors in their consulting rooms and in the treatment room, but it soon became clear that it would be preferable to have a State Registered Nurse working more or less full time in the Centre. This enabled one State Enrolled Nurse to be released from the team, which now consists of two Community Nurses, one "indoor" State Registered Nurse, and one State Enrolled Nurse who spends part of her time on the district and part working in the Centre. This system seems to be working very well, and in the first six months of 1968 an attempt is to be made to record and evaluate the team's pattern of work.

A Health Visitor who is not part of the team is also based at the Centre. She has responsibility for those Stockwood residents who are not registered with doctors practising from the Health Centre.

The office is in the charge of a full-time clerk, who has working with her two part-time shorthand typists. Three part-time clinic helpers assist in the office and elsewhere, and there is a non-resident caretaker.

Services provided

The family doctors provide a full range of medical services for the patients in their care. In addition to the usual surgery consultations, separate ante-natal and infant welfare sessions are held by the family doctors with the assistance of one or more members of the nursing staff. They make full use of the treatment room, where in addition to the usual facilities for dressing, injections and minor surgery, there is a cautery machine, a grey wedge haemoglobinometer, and an electrocardiograph. A full appointment system is in operation for all general practitioner sessions.

A local authority medical officer holds a weekly child welfare clinic. Much of the work of this session is the routine physical and developmental examination of children, as the family doctors have taken over most of the immunisation and medical advisory work which is a feature of other local authority child welfare clinics.

The local authority also provides the part-time services of a chiropodist and a physiotherapist. Parentcraft and relaxation classes are held, and the District Midwife makes use of the premises for interviewing and examining patients. At the end of 1967 plans were being made for a weekly screening clinic for the middle-aged and elderly which will be held by a local authority medical officer in co-operation with the family doctors.

Health education is not forgotten. The topic of the month is pursued, and in addition the theme of road safety is being explored in its various aspects.

Summary

Health Centres exist because of the opportunities they provide for co-operation between family doctors and local authority field workers, to the benefit of the popu-

lation under their care. At Stockwood the general practitioners, the local authority staff, and the building itself are ideally suited to such fruitful co-operation. Under such conditions one can hope to achieve all that is best in community care.

All the statistics included in this report, together with the notes on St. George Health Centre, have been prepared by Mr. W. B. Fletcher. Mr. Fletcher is First Assistant (Records and Organisation) in the Department of Public Health.

Dr. P. N. Dixon is an Assistant Medical Officer of the Department of Public Health and has special responsibilities in connection with Stockwood Health Centre.

VETERINARY INSPECTOR'S ANNUAL REPORT

J. Allcock, B.V.Sc., M.R.C.V.S.

(Inspector under Diseases of Animals Act)

NOTIFIABLE DISEASES

Foot and mouth disease has dominated 1967 in so far as notifiable diseases are concerned.

Firstly a fairly serious series of outbreaks in Northumberland, then in October the worst series of outbreaks this century began in Shropshire. The disease spread rapidly and on November 18th the whole of England and Wales was declared a controlled area.

This meant that all animals moving from place to place had to be licensed, and all markets except those for slaughter ceased. In all 906 licences were issued for 5,420 cattle, 11,036 sheep and 7,702 pigs moving into Bristol.

81 Special Orders declaring certain areas to be infected were issued by the Ministry of Agriculture.

At the height of the outbreak amateur precautions reached a stage which was almost hysterical, and although no doubt the intentions of all concerned were good, some of the procedures adopted could only be described as useless.

The straw disinfectant barriers on roads were in my view a case in point. They were often not wide enough to allow the whole diameter of the vehicle wheel to reach the disinfectant. The disinfectant itself would be rapidly rendered useless with constant passage of vehicles, and most important, the parts of the vehicle under the mudguards where bovine faeces could well collect and be carried was left quite untouched.

In spite of some pressure Bristol did not succumb to the temptation of putting down these disinfectant barriers.

Scores of requests for advice from the general public were received, varying from the advisability of cancelling a canoeing trip on the Severn (in November!) to the dangers inherent in the transport of a parrot to Northern Ireland. Although in retrospect many of these queries seem absurd one must commend the helpful attitude and spirit that they demonstrate. And this is from people with no direct connection and no financial stake in agriculture.

On the other hand, throughout the whole outbreak, markets for immediate slaughter have continued with little or no restriction on the persons visiting those markets and mixing with the cattle therein.

In another context one hears the phrase "the language of priorities." I feel that in foot and mouth control some of our priorities are suspect. During an outbreak of such severity it is possible for all animals to go direct to slaughter houses and have no markets—and congregations of people—at all. It should not be beyond the wit of man to devise a scheme whereby the producer retains possession of the carcase and sells it as meat, thus allowing the producer the opportunity of refusing a price he does not consider sufficient.

A number of technical breaches of regulations and one serious breach of movement regulations occurred. In this latter case a prosecution is pending.

ANTHRAX

Anthrax has on two occasions been introduced into the City via hides brought in for processing. On each occasion several days elapsed before anthrax was diagnosed in the carcase, and the affected hide had been transported with many other hides, dressed, salted and handled by many workers. The affected hide and the hides immediately contiguous were destroyed and as much general disinfection as possible instituted on each occasion, but we were inevitably much too late in starting and short of complete destruction of some thousands of pounds worth of hides and equipment this disinfection could only be described as "hopeful."

Vigilance on the part of farmers and slaughtermen is the only method of preventing such recurrences. One ray of light in a very murky business is that these two incidents did result in a number of workers involved taking advantage of the opportunity of being themselves vaccinated against anthrax.

RABIES

Only constant vigilance by the Customs officers and the Docks Police prevents an influx of dogs and cats arriving as pets of the crew from landing in this country. While I would totally oppose any relaxation of quarantine regulations for anyone, I do feel that there is an inconsistency in that the private individual bringing in a dog or cat is expected (rightly) to keep strictly to the six months' quarantine, while any breach of the regulations by a foreign-going vessel in allowing a pet animal to escape is treated as a very minor technical offence in the courts. In my opinion the only way to ensure that animals on board vessels are so kept is to make the master deposit a very substantial bond which is refunded when the vessel leaves with the animal still satisfactorily on board.

PET ANIMALS ACT

Twenty-four shops are licensed under this Act. All have been visited during the year. The majority keep the animals in good conditions, but a few—and the same few—never seem to be able to raise the standard of cleanliness above a very bare minimum. In two cases licences were withheld until a substantial improvement had been achieved.

RIDING ESTABLISHMENTS ACT

Two premises are licensed under this Act and both have been visited several times during the year.

BOARDING ESTABLISHMENTS ACT

Three premises are licensed as boarding kennels. All have been visited, and all are satisfactory.

PIGEONS

The discussions continue on methods of pigeon control, and at Avonmouth in particular these birds are causing serious trouble. While I have spent many hours in discussion nothing has been achieved and meanwhile the only positive steps that appear to be taken consist of applying strip to buildings so that the pigeons will roost elsewhere. A very few are trapped, but so few as to have no effect on the total population.

As an illustration of the numbers involved the following is of interest. Premises near the centre of Bristol were inspected by the public health inspectorate acting under the Offices, Shops and Railway Premises Act. Stains were noted on a ceiling and on inspection of the attic above a pigeon nesting site discovered. Some three tons of pigeon faeces, nests, dead pigeons and eggs were removed from this attic.

The hardy annual miscellaneous topics have recurred again—disposal of dead dogs and cats, animals in schools, planning advice and stray animal accidents. I hope the advisory side has been satisfactory, but I am sorry to report that where problems exist requiring money—as with pigeons, disposal of carcasses and animals in schools—nothing further has been achieved.

Finally I must thank all those who help. The Corporation departments, and in particular the Public Health Inspectors, the Police, the Customs and many others.

